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USAFETAC/TN-85/002

AD-A159 989



CENTRAL AMERICAN CLIMATOLOGY

By

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USAFETAC/OL-A

Asheville, North Carolina

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SECURITY CLASSIFICATION OF THIS PAGE

AD-A159 989

REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION Unclassified		1b. RESTRICTIVE MARKINGS							
2a. SECURITY CLASSIFICATION AUTHORITY		3. DISTRIBUTION/AVAILABILITY OF REPORT <i>Approved for public release Distribution unlimited.</i>							
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE									
4. PERFORMING ORGANIZATION REPORT NUMBER(S) USAFETAC/TN-85/002		5. MONITORING ORGANIZATION REPORT NUMBER(S)							
6a. NAME OF PERFORMING ORGANIZATION USAF Environmental Technical Applications Center	6b. OFFICE SYMBOL <i>(If applicable)</i> OL-A	7a. NAME OF MONITORING ORGANIZATION USAF Environmental Technical Applications Center							
6c. ADDRESS (City, State and ZIP Code) Federal Building, Room 305 Asheville, NC 28804		7b. ADDRESS (City, State and ZIP Code) Scott AFB, IL 62225							
8a. NAME OF FUNDING/SPONSORING ORGANIZATION	8b. OFFICE SYMBOL <i>(If applicable)</i>	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER							
8c. ADDRESS (City, State and ZIP Code)		10. SOURCE OF FUNDING NOS. PROGRAM ELEMENT NO. PROJECT NO. TASK NO. WORK INIT NO							
11. TITLE (Include Security Classification) Central American Climatology									
12. PERSONAL AUTHOR(S) USAFETAC/OL-A Climatology Applications Unit									
13a. TYPE OF REPORT Final	13b. TIME COVERED FROM _____ TO _____	14. DATE OF REPORT (Yr., Mo., Day) 85/04/01	15. PAGE COUNT 162						
16. SUPPLEMENTARY NOTATION									
17. COSATI CODES <table border="1"><tr><th>FIELD</th><th>GROUP</th><th>SUB. GR</th></tr><tr><td>04</td><td>02</td><td></td></tr></table>	FIELD	GROUP	SUB. GR	04	02		18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number) Climatology of Central America, weather in Central America, Climatological data for Central America, climatological maps and charts for Central America.		
FIELD	GROUP	SUB. GR							
04	02								
19. ABSTRACT (Continue on reverse if necessary and identify by block number) A presentation of climatological information for the Central American region from Guatemala and Belize southward through Panama. Includes narrative descriptions of Central American climate and weather, to include major synoptic features, precipitation, psychrometrics, cloudiness, visibility, surface winds, thunderstorms, fog, and haze. Also includes astronomical, tidal, and seismic data. Includes contoured climatological charts and climatological data tables. Primarily addresses surface weather data, but includes some upper atmospheric data.									
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input checked="" type="checkbox"/> DTIC USERS <input type="checkbox"/>		21. ABSTRACT SECURITY CLASSIFICATION Unclassified							
22a. NAME OF RESPONSIBLE INDIVIDUAL T Jonathan Whiteside		22b. TELEPHONE NUMBER <i>(Include Area Code)</i> 704 259-0233	22c. OFFICE SYMBOL USAFETAC/OL-A						

PREFACE

The effects of weather on military operations are well documented in history and must be considered in nearly every aspect of military planning and execution. A readily available source of regional weather and climatic information has been shown to be a "must" for military planners.

A traditional source of such data has been Section 23 of the National Intelligence Survey (NIS), published from 1950 to 1972. Section 23 of the NIS, titled "Weather and Climate," has been a traditional planning standby as a source for worldwide climatic data, especially for areas of the world in which weather observations and climatic records were scarce. Since the NIS data are deficient in some ways and obsolete in others, the need for a new regional climatic data source has become obvious.

This technical note, which describes Central American climatology in some detail, is intended to fill that need by updating and supplementing the NIS Section 23 information (published in 1969) for that region. The first consideration in developing this document was to provide planners with more and better climatological data relevant to present and future operations. It includes new contoured analysis charts that display ceiling, sky cover, visibility, relative humidity, temperature, and precipitation patterns (current and operationally significant categories have been added where suitable). Also included are expanded paradrop tables, upper air charts, a heat stress index, discussions of diurnal and seasonal variations, and cloud-free-line-of-sight (CFLOS) tables. Information is presented as follows:

Chapters 1 through 4 familiarize the reader with Central American geography, topography, major synoptic features, and the most significant climatological patterns for the region.

Appendix A provides contoured surface and upper air charts to help readers visualize and understand the spatial distribution of the most significant Central American climatological features.

Appendix B provides climatological tables that offer more detail on the climatic variables discussed in the rest of the document. These tables will help readers who need detailed (site specific) information, or who need to produce specialized analyses of their own.

This report, as presented, will not satisfy all planning data needs. It may be necessary to consult a staff weather officer, USAFETAC, or another data source for more specific or detailed information.

The author would like to express his appreciation and thanks to the many people throughout USAFETAC who contributed their time and effort to this project, and without whom this technical note could not have been accomplished. Special thanks to Messrs. V.B. Gibbs, R.L. Rodney, and H.M. Fountain, who lent their expertise and experience to the project and should be recognized as contributing authors. Thanks are also due Mrs. D. Norton for preparing the extensive data tables.

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CHAPTER 1
Central American Geography

1.1 Introduction. Central America is technically a northwest to southeast isthmus that connects southern Mexico and the Yucatan Peninsula to Colombia. It is made up of the countries of Belize (formerly British Honduras), Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, and Panama. Central America lies between 7 and 19 degrees north latitude, and between 77 and 93 degrees west longitude. The Caribbean Sea is on the east, the Pacific Ocean on the west.

Central America

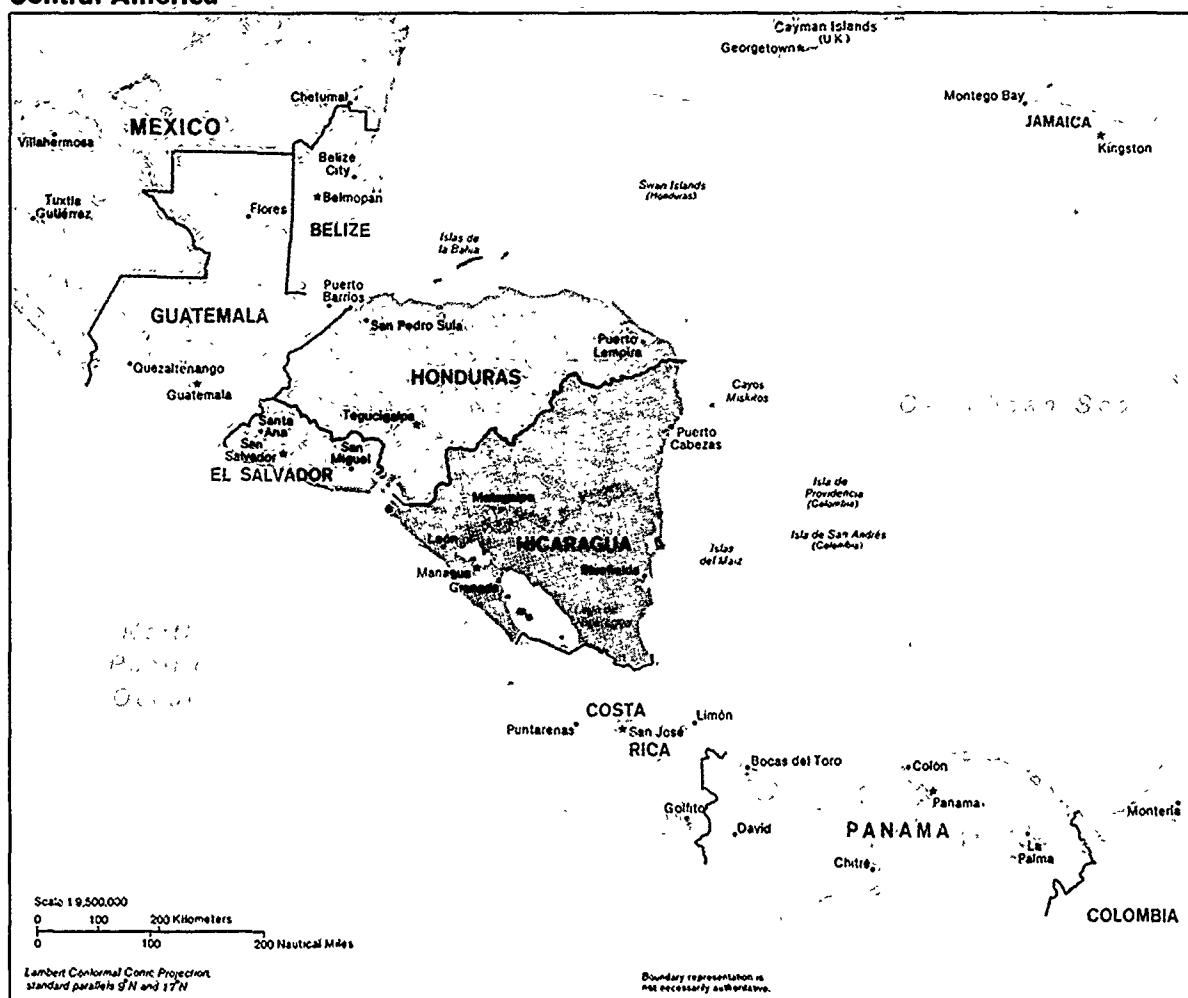


Figure 1-1 The Countries of Central America.

1.2 Terrain. Central American terrain can be generally described as a series of rugged mountain ranges separated by valleys. There are two exceptions to this pattern. The first is in Belize and northern Guatemala, where the highest elevations are below 4,000 feet and most of the area consists of lowlands and coastal plains. The second exception to the mountain-valley pattern is the region made up of the Caribbean coastal plains and the lowlands of eastern Honduras, Nicaragua, and Costa Rica. This region extends inland as much as 50 to 100 miles in parts of Honduras and Nicaragua, and extends through northern Costa Rica to Lago de Nicaragua, Nicaragua. The remaining coastal regions give way rapidly to mountain ranges, which in many areas extend right down to the shoreline.

On the Pacific side of Guatemala, a narrow coastal plain rises quickly to mountain peaks that approach 14,000 feet within 25 to 50 miles of the coast. Numerous peaks on Guatemala's Pacific side and down the mountainous spine through central Costa Rica and western Panama exceed 10,000 feet. These terrain variations have a profound effect on the region's climate. Coastal and lowland areas, for example, are subject to flooding during the wet season and after any period of heavy rain. Rain forests

and jungles can become impassable quickly. Even in the higher elevations, mountainous areas are subject to mudslides during heavy rains, and valleys may flood. These mountain ranges also serve as effective barriers to some weather elements. For example, large climatological decreases in precipitation over very short distances are common, especially from the windward sides of mountain ranges to the leeward valleys and beyond. Most population centers are on the sides of mountains and in the interior valleys where, because of the elevation and sheltered location, the climate is cooler, drier, and better suited to human habitation.

Another important Central American feature is its volcanic activity. There are numerous volcanoes along the Pacific side (all associated with the well known "Ring of Fire") and down the mountainous spine through central Costa Rica and western Panama. Many of these volcanoes are active, including Alotenango, in Guatemala, Santa Ana in El Salvador, and Irazu in Costa Rica. During the past 20 years, there have been numerous recorded eruptions and other volcanic disturbances in Guatemala, El Salvador, Nicaragua, and Costa Rica.

1.3 Time Zones. Central America lies across two time zones. Panama is minus 5 hours GMT to LST. The rest of Central America is minus 6 hours GMT to LST. See Figure 1-1.

CHAPTER 2

Major Synoptic Features

2.1 The Equatorial Trough. The equatorial low pressure trough (also called the Intertropical Convergence Zone, or ITCZ) is an area of surface convergence near the equator between the northern and southern hemispheres' subtropical highs. The location, strength, and meanderings of the equatorial trough and the subtropical highs have a tremendous influence on, and are major controlling factors of, Central American weather. This band of low pressure also serves as the "meteorological equator," or the boundary between the northern and southern hemispheres' general circulation and pressure patterns.

Figure 2-1 shows the mean position of the equatorial trough by month. During the winter, or dry season, the equatorial trough moves southward, away from Central America, in conjunction with the strengthening and southward extension of the Atlantic subtropical high. From early spring through fall, the opposite effect is seen as the equatorial trough moves northward into Central America. This, of course, is a simplistic view. Year-to-year variations are influenced by numerous, often unexplained, anomalies such as the change in ocean surface temperatures related to the "El Niño" (unusually warm sea surface temperatures off the western coasts of South and Central America). Anomalies aside, the equatorial trough is probably the single most dominant synoptic feature affecting Central America.

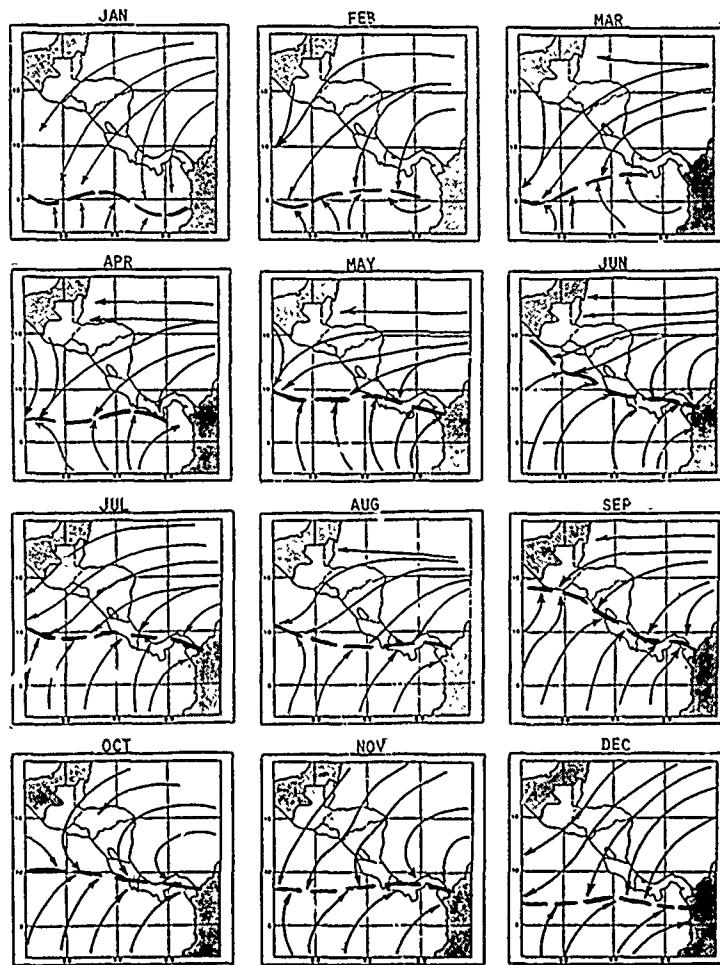


Figure 2-1 Equatorial Trough and Surface Wind Flow.

When a more detailed analysis is required, the general term "equatorial trough" is often replaced by either "monsoon trough" or "trade wind trough," depending on the circulation pattern. The monsoon trough, with easterly trades to its north and westerlies to its south, prevails in Central America from mid-spring through late fall. To the south of the monsoon trough is an area of extensive cloudiness and strong convective activity. During the rest of the year, the easterly trades of both hemispheres converge to establish the trade-wind trough. The resulting vertical shear between the low-level easterlies and upper-level westerlies provides an effective mechanism for capping convective growth during the winter months. See Figure 2-1 and Charts A-48 through A-67.

2.2 Trade Winds. The northeasterly trades lie between the equatorial low pressure trough and the northern hemisphere subtropical high pressure belt. They are the most consistent and persistent winds in that region, averaging 7-9 knots year round. Figure 2-1 shows the generalized flow of the trades, which are east-northeasterly most of the year over most of the region. Areas south of the equatorial trough are dominated by the southern hemispheric southeasterly trades. During the northern hemisphere summer (July-September), a buffer zone of westerlies lies between the equatorial trough and the southern hemispheric southeasterly trades. These westerlies meet the northeasterly trades in the equatorial (monsoon) trough, setting up the strong convergence zone associated with the trough in mid- to late summer.

Figure 2-2 shows selected soundings for the two months chosen as extreme examples: March (dry) and October (wet). Except for the low-level trade wind inversion in March, the temperature profiles are very similar. The dew point profiles, however, show the very strong dry layer between the 600 and 800 millibar levels in March that is not present during October. This shows that the most important elements in a tropical sounding are the vertical distributions and time changes of moisture. Vertical temperature profiles show little daily change from the mean profiles. In the example, the March sounding shows the trade wind inversion that acts as a drying cap to vertical development of precipitation. The October, or wet season, sounding shows an increase in low-level moisture accompanying the change in low-level wind direction and speed. Many of the criteria used to analyze mid-latitude soundings are of limited value in tropical analysis because of the consistency of day-to-day values. In tropical maritime climates, tropopause heights, condensation, and free convection levels show almost no daily variation because of the uniformity of temperature and moisture. Similarly, stability indices have limited use in Central America. By season, the tropical atmosphere is very uniform. Therefore, the daily change in moisture and the vertical wind profiles are the elements to watch. See Charts A-48 through A-67.

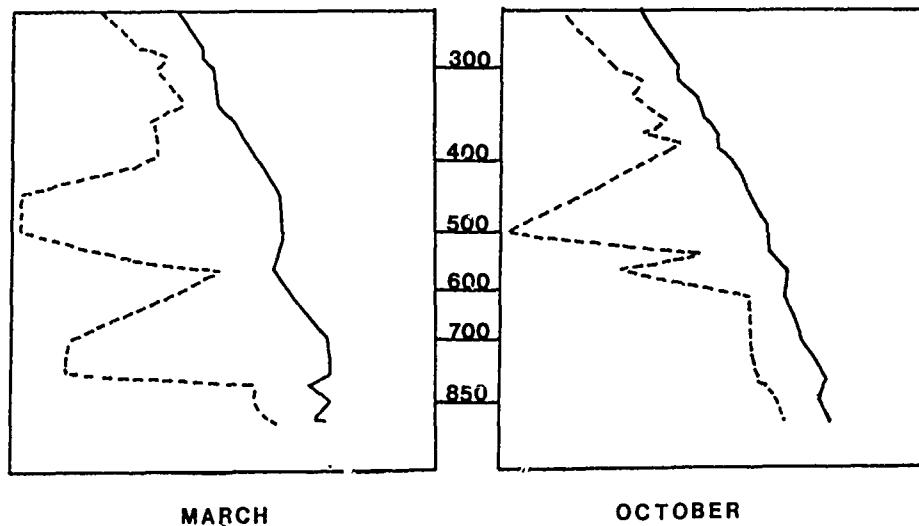


Figure 2-2 Atmospheric Profiles of Temperature and Dew Point for March (Dry) and October (Wet) at San Jose, Costa Rica.

2.3 Storm Systems.

2.3.1 Hurricanes and Tropical Storms. The hurricane is the most destructive storm system known. Typical accompaniments to these storms are widespread flooding, storm surges, strong winds, and occasionally, tornadoes. Most Atlantic storms develop off the west coast of Africa in easterly waves or in disturbances moving out of the equatorial trough and away from the equator. Some Atlantic storms then move westward into the Caribbean Sea and to Central America. Other storms form in the Caribbean east of Nicaragua and north of Panama, moving north or northwest. Pacific hurricanes form west of El Salvador and Guatemala, but generally move north-northwest away from Central America. Hurricanes are rarely seen within 9 degrees of the equator.

Figure 2-3 gives shows the number of hurricanes and tropical storms over Central America, based on counts of occurrences within 60 nautical miles. Data are for years 1871 through 1980. Major storm tracks are shown by arrows. Areas primarily affected are the Nicaraguan coast, the Honduran coast from Trujillo eastward, and all of Belize and northern Guatemala. Table 2-1 shows the number of hurricanes and tropical storms that make landfall in each of the Central American countries. Although a number of other storms have passed close enough to the Caribbean coast to have affected coastal and lowland areas, they have not been included in Table 2-1. As the table shows, September and October are the most active months even though the storm season runs from May through December.

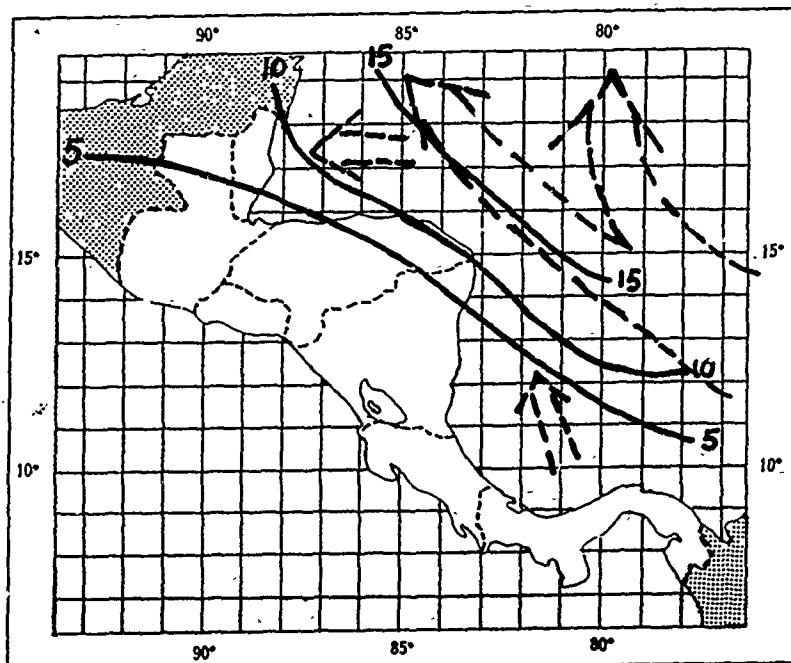


Figure 2-3 Number of Hurricanes/Tropical Storms Within 60 NM (solid lines) and General Direction of Movement (dashed arrows).

TABLE 2-1 Number of Hurricanes/Tropical Storms (Depressions) Making Landfall by Country, 1871-1980.

Note: Storms making landfall on offshore islands or possessions are omitted from the count. Although Table 2-1 gives storm count by country, several individual storms crossed two or more countries and were counted that way. Note that Belize has recorded only 15 hurricanes and 23 storms of lesser strength in 110 years. Tropical storms invade Belize only about once every 3 years, and affect the other Central American countries even less frequently.

2.3.2 Northers. Northers are actually the trailing ends of shear lines that result from strong North American (continental) polar outbreaks. They occur from late December through March, and primarily affect Belize, northern Guatemala, and Honduras. However, the cooler, drier air behind a strong front can sometimes reach as far south as western Panama. These outbreaks modify the "dry season," bringing winter precipitation to Belize and northern Honduras (See Figure 3-1) and causing the relatively lower mean temperatures along northern coastal regions (See Table B-3).

2.3.3 Temporals. When the tropical upper tropospheric trough (TUTT), usually seen as a weak trough at the 200-300 millibar level, establishes itself northeast to southwest from Cuba to Central America, small surface low pressure centers sometimes form along the Pacific coast of Central America. These low

pressure centers act as cool core systems when compared to the warm, weak ridges on either side of the TUTT. "Temporals" are slow-moving depressions (similar to tropical depressions) that appear to form in, or move out of, the equatorial trough in the Pacific and move slowly up the west coast of Central America. These storms are large areas of stratiform cloudiness with steady rain. Because of their slow motion and steady rainfall, they can cause flooding and mudslides along the Pacific coast and in the coastal mountain ranges. Although temporals do not always bring the thunderstorm activity common to hurricanes and tropical storms, these stratiform cloud systems can occasionally conceal imbedded thunderstorms (See Figures 2-3 and 3-1, Tables 2-1 and B-3).

2.4 Upper Air Circulation. Figures 2-4 and 2-5 are vertical cross-sections of mean zonal winds (surface to 100 millibars) for January and July, and for April and October, respectively. Light easterly winds (10 knots or less) dominate throughout the year from surface to between 400 and 500 millibars. From there up to 100 millibars. Winds are generally westerly from December to June, and easterly the rest of the year. Westerly winds are strongest, reaching mean maximum speeds of 30 knots between 150 and 200 millibars. Easterly winds are always light, and usually less than 10 knots.

Stratospheric winds are dominated by the "quasi-biennial oscillation" that results in a direction reversal about every 11 to 15 months. Areas of maximum speed originate at about 30 millibars (25 kilometers) and descend about 1 kilometer a month until they near the tropopause. Periods of easterly winds are strongest, with mean speeds reaching 40 knots and maximum speeds from 70 to 80 knots. Periods of westerly winds are generally only half that strong. See Charts A-48 through A-67.

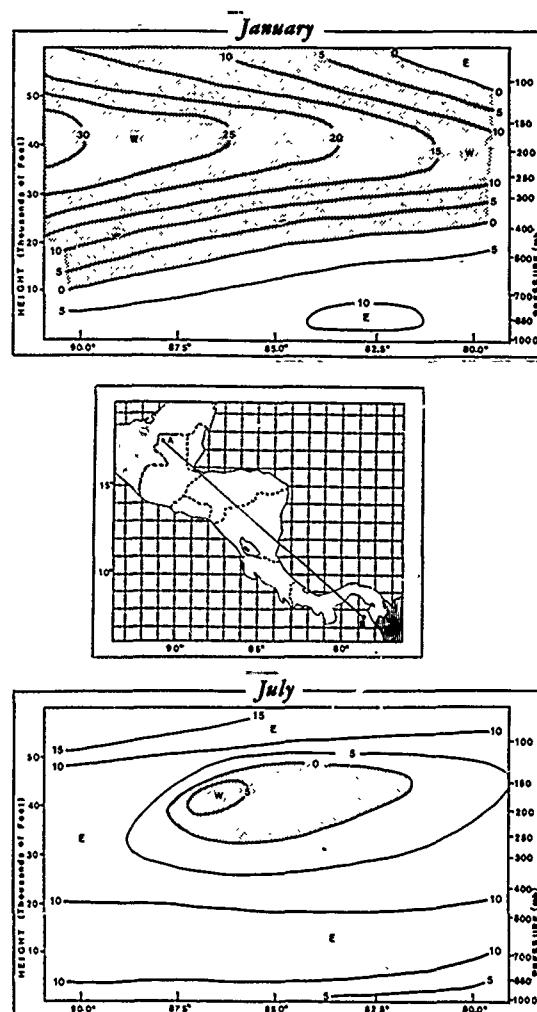


Figure 2-4 Mean Zonal Winds for Upper Air Vertical Cross Sections Along Line AB for January and July. Speeds in knots.

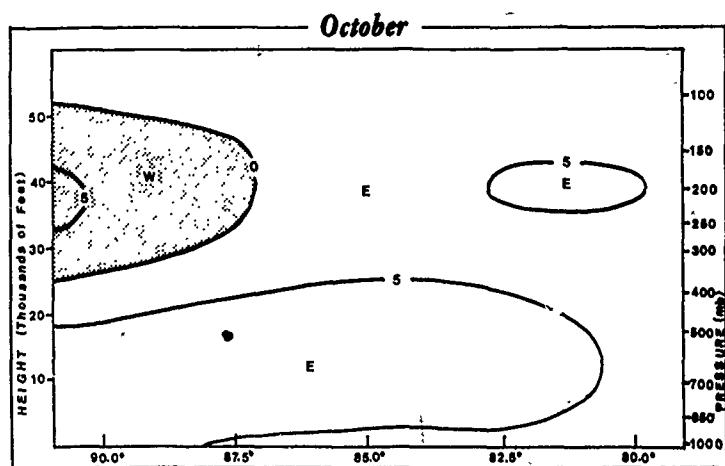
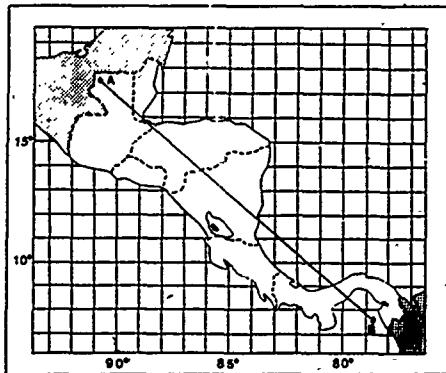
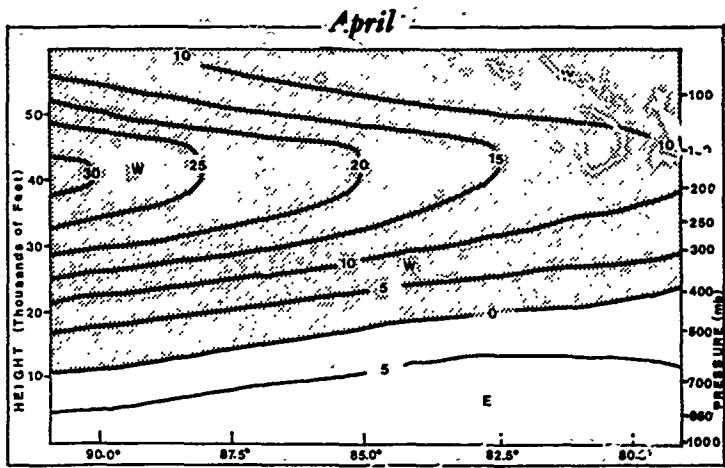


Figure 2-5 Mean Zonal Winds for Upper Air Vertical cross Sections Along Line AB for April and October. Speeds in knots.

CHAPTER 3

Weather Phenomena

3.1 Precipitation. Precipitation is often considered the single most significant weather element in Central America; not surprising, considering that the region is a relatively narrow tropical isthmus with the Caribbean Sea on the east and the warm Pacific on the west. Free from the influences of a large continental landmass, Central American precipitation becomes primarily a function of wind direction and station elevation. Only rarely is a mid-latitude frontal system strong enough to push this far south. Occasionally a major polar outbreak, or "norther," (See Para 2.3.2) pushes a frontal system across the Gulf of Mexico south of Cuba to influence Central America's winter weather. When it does, it usually brings rain and gusty winds to the Caribbean coastal areas of Belize, Honduras, and Nicaragua. After these rare frontal passages, the mild tropical winter, or "dry season" returns. Frontal regimes, however, are of little significance when compared to the prevailing onshore flow that accompanies the long and wet summer season.

All of Central America is under the influence of maritime air masses. The persistent northeast trades, although shallow, are heavily laden with moisture. This moisture is generally released along Caribbean coastal areas, particularly where terrain influence plays a major role in precipitation patterns. The best example of this kind of heavy rainfall is along the Caribbean coasts of Costa Rica, Panama, and Nicaragua. See Chart A-3, Mean Annual Precipitation.

Along the Caribbean coast, the wet season normally starts in May and ends in November. The subtropical ridge builds in the Atlantic, shifting northward to follow the sun. Along with this northerly shift, the equatorial (monsoon) trough moves northward to dominate the summer weather pattern and signal the start of the wet season (See Figure 2-1 for the mean position of the equatorial trough). Many stations show double maxima for precipitation amounts. The first maximum is normally in June, at the beginning of the wet season, while the second is in November, near the end of the wet season. Managua, Nicaragua, for example, clearly shows these dual June-October maxima. See Figure 3-1.

June through October is the normal wet season throughout Central America, and January through April the normal dry season. However, since the annual rainfall is more than 150 inches, with considerable variation, the terms "wet" and "dry" become relative. Bluefields, Nicaragua, is a prime example. This station, on the Caribbean coast, gets large amounts of rain from May through December, with some months in excess of 20 inches and all wet season months in excess of 10 inches. But even during Bluefields' short "dry" season (February through April), the monthly average is more than 3.5 inches. The moist trades, releasing their moisture as they move over Nicaraguan and Costa Rican coastal areas, give this area its exceptionally heavy rainfall amounts. See Charts A-1, A-2, and A-3.

In the rugged mountain terrain of western Guatemala, some of the driest and wettest locations are found, sometimes only miles apart. The Sierra Madre Mountains block moist air coming off the Pacific. As a result, these mountains, several with peaks over 12,000 feet, get some of the highest rainfall amounts in Central America (more than 120 inches a year) on their lower windward slopes. There is little rain at elevations above 8,000 feet and in the interior valleys. As an example, San Rafael, Guatemala, at 2,164 feet on the windward slopes, gets more than 150 inches of rain a year. Nearby Agua Blanca, at 2,919 feet but in an interior valley, gets less than 30 inches. Seasons are different, too. Lower windward slopes have a long wet season: May through October, with dual maxima in June and September. In contrast, interior regions receive nearly all their rainfall from June through September, with no strong maxima (See Figure 3-1). As can be seen on Chart A-3, this interior region of Guatemala, as well as the southern Honduran and northern Nicaraguan mountain interiors, are the driest areas in Central America, averaging only about 30 to 40 inches a year. While an annual rainfall of 40 inches is not ordinarily considered "dry," when nearby areas get two to four times that amount, the relative dryness is noteworthy.

With the freezing level almost always above 15,000 feet, snow in Central America is rare except for an occasional snowfall on the higher mountain peaks. Hail is almost never seen. See Figure 3-1; Charts A-1, A-2, and A-3; Tables B-1 and B-2.

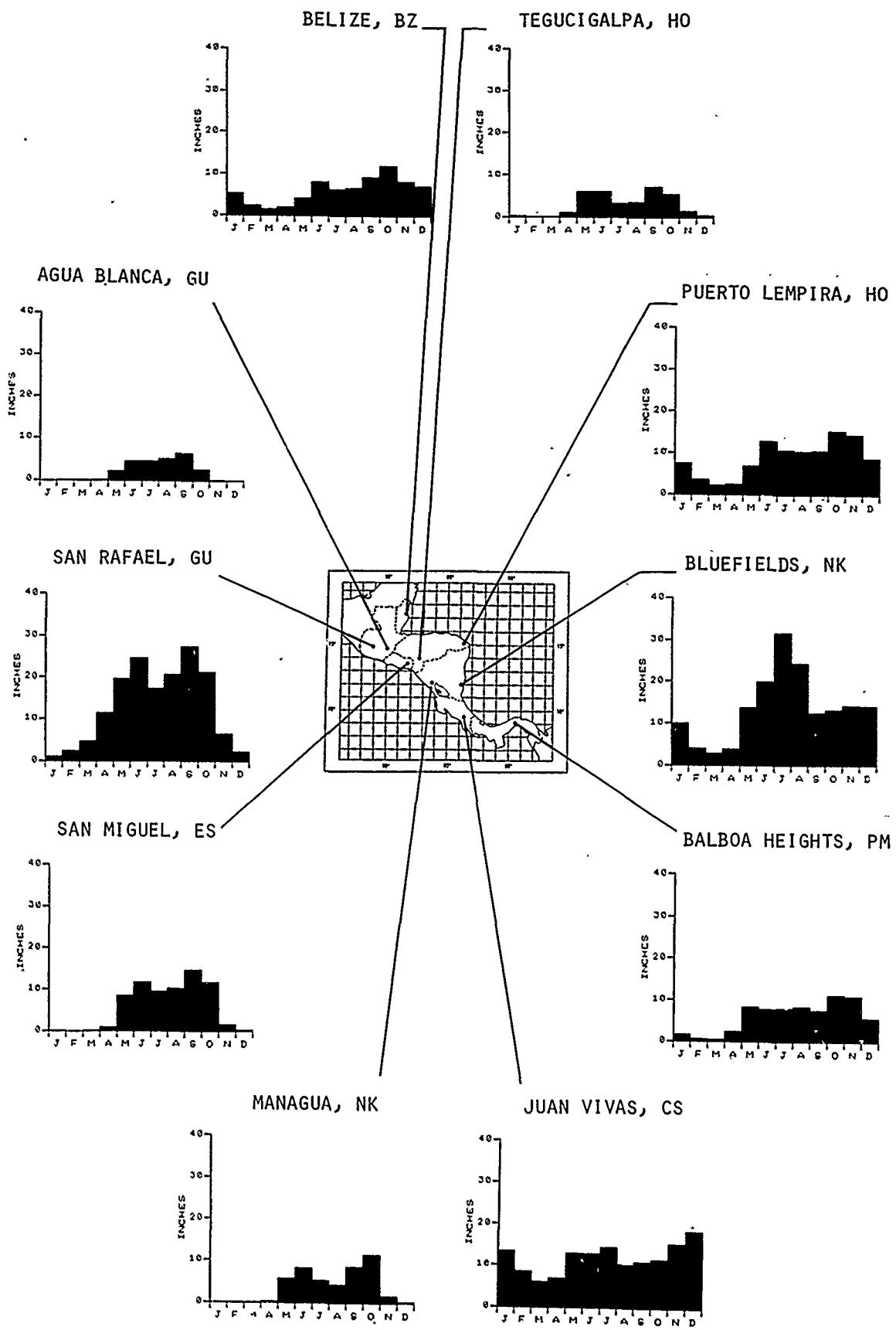


Figure 3-1 Mean Monthly Precipitation in Inches, Selected Locations.

3.2 Psychrometrics.

3.2.1 Temperature. Figure 3-2 shows mean monthly temperatures. Even though Central America is in the tropics, there are some large temperature variations due to elevation. Mean temperatures at Managua, elevation 160 feet, are 10 degrees warmer than at San Jose, with an elevation greater than 3,200 feet. Also, diurnal and annual variations at the higher elevations are greater than those variations at sea level. The persistently warm temperatures and high humidities of Central America are largely due to the proximity of the warm tropical waters of the Caribbean sea and Pacific Ocean, both with consistently warm sea surface temperatures throughout the year. For example, La Ceiba, Honduras, has only a 5 to 6 degree annual variation in sea surface temperature (See Figure 3-3). Afternoon temperatures on both coasts are modified only slightly by sea breezes.

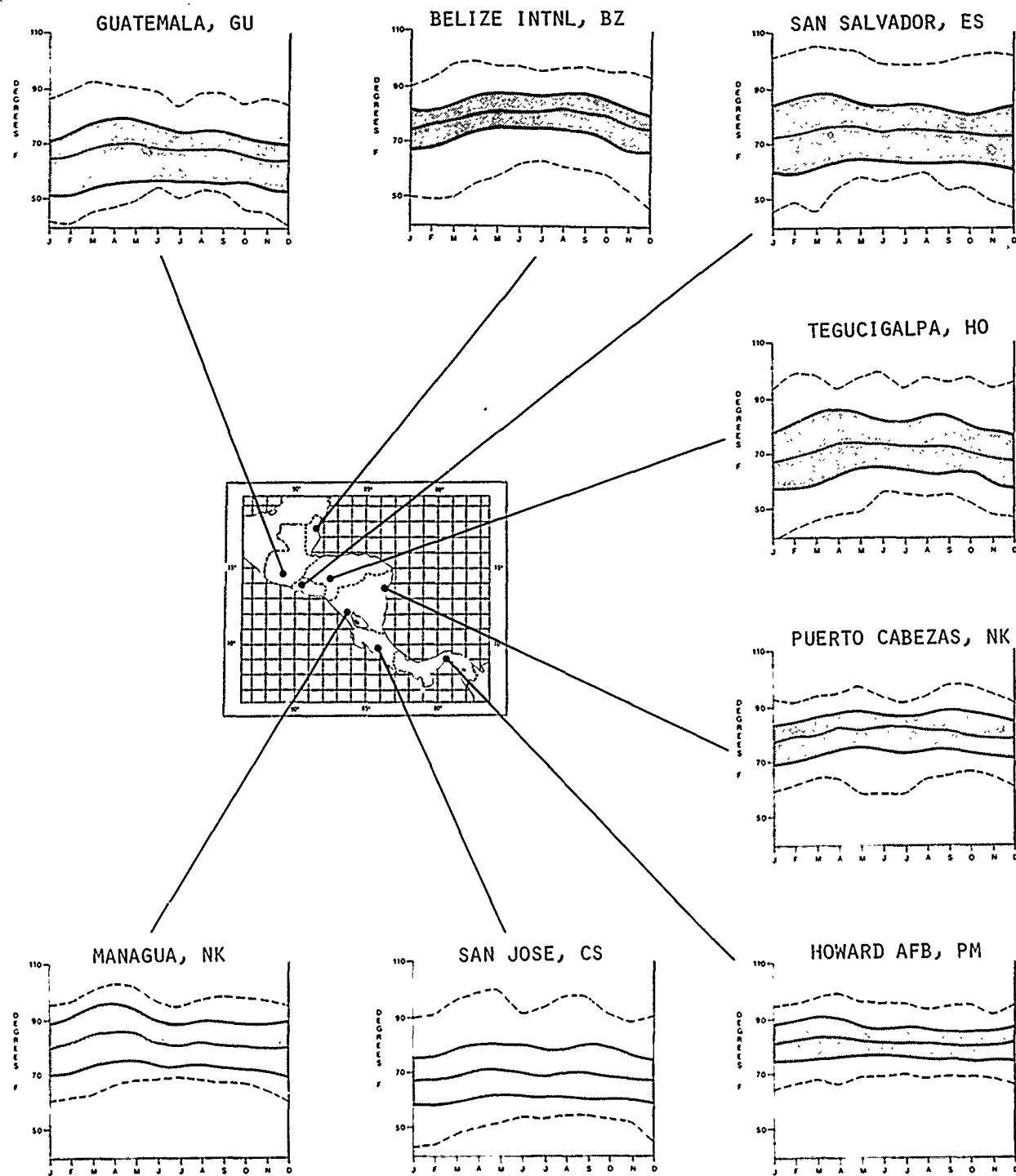


Figure 3-2 Mean Monthly Temperatures (Solid lines within shaded area) and Extremes (Dashed lines). Shaded areas show variations of daily means around the overall mean. Temperatures in degrees Fahrenheit.

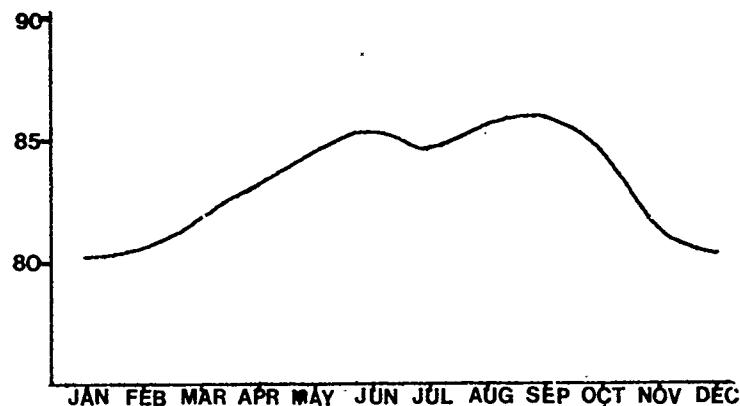


Figure 3-3 Sea Surface Temperatures (degrees F), La Ceiba, Honduras.

Temperatures in the lower elevations of Central America, especially in the southern half, are uniformly warm, with little annual or diurnal change. However, temperatures at higher elevations in the interior are more like those at higher latitudes, with warm afternoons and cool evenings. In the interior, dry season mean diurnal temperature changes are often two or three times the annual range. Temperature ranges are definitely dependent on elevation, as shown in Table 3-1.

TABLE 3-1 Temperature Change with Elevation.

<u>Elevation</u>	<u>Mean Temperature</u>	
	<u>Daytime Max</u>	<u>Nighttime Low</u>
Below 3,000 feet	80-90°F	60-70°F
3,000 to 5,000 feet	70-80°F	50-60°F
5,000 to 10,000 feet	60-70°F	40-50°F
Above 10,000 feet	50-60°F	30-40°F

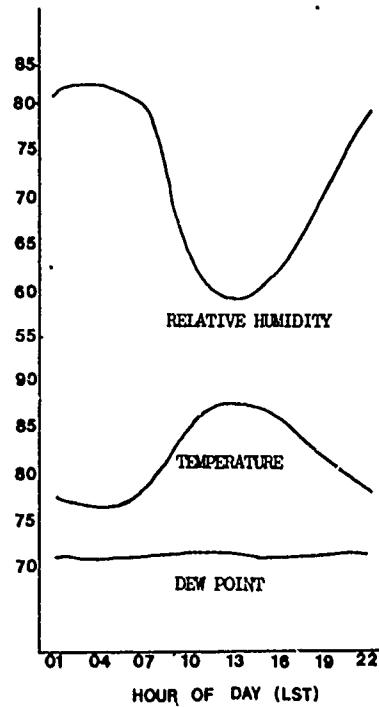
Cold fronts strong enough to modify temperatures reach Central America only occasionally. When they do, they almost always dissipate before reaching the southern regions. These fronts are often referred to as "Northerns," or "Norte" (See Para 2.3.2).

The warmest temperatures occur near the end of the dry season, except in the lowlands of the southernmost parts of Central America, where mean temperatures are relatively warm throughout the year despite seasonal rainfall changes.

Elevation, solar angle, cloud cover, and frontal passage from the north are all factors that control temperature. For example, the cloudy skies over most of the Pacific coast and much of the interior contribute to the lower mean maximum temperatures experienced in these areas.

Another important aspect of tropical climate is the diurnal variation in mean values of temperature, dew point, and relative humidity (See Figure 3-4). There is very little diurnal variation of mean dew point even with a variation in relative humidity. The daily relative humidity cycle is not caused by changes in moisture, but by changes in temperature that determine the amount of moisture the air can hold.

Figure 3-4 Mean Relative Humidity, Temperature, and Dew Point for Howard AFB, Panama, for April (The Warmest Month).



3.2.2 Relative Humidity. Central America sees high relative humidities all year long. In combination with warm temperatures and typically light winds, these high humidities make for oppressive conditions in the lower elevations. Some local and seasonal variations in relative humidity are shown graphically in Figure 3-5. The Caribbean coast's high year-long humidities are primarily due to strong onshore trade winds. The Pacific coast and most of the interior regions, however, show more seasonal variation because of the more sharply defined wet and dry seasons. Maximum relative humidities of 80 to 90 percent are common during the early morning hours throughout Central America. There is more variation of minimum relative humidity in the afternoon, with values of 60 to 70 percent common along the east coast and in much of Panama during the January-April dry season, and 70 to 80 percent in the June-October wet season. Throughout the interior and on the northern Pacific coast, afternoon humidities are much less oppressive, with greater seasonal variation. During the wet season, they range from 50 to 70 percent, while during the dry season generally from 40 to 60 percent. Even with lower afternoon humidities, warmer temperatures increase human discomfort, especially in lowland areas sheltered from onshore winds. The only sanctuary from humidity is elevation, with conditions above the 4,000 foot level much more comfortable.

3.2.3 Human Comfort. Although temperature and humidity are the most important elements that influence human comfort in the tropics, other factors include wind, insolation, barometric pressure, clothing, physical activity, and physical condition. In consideration of these influences, researchers have developed a temperature-humidity index to provide an "apparent temperature," or an estimate of what a given temperature "feels like" at various relative humidities. Table 3-2 gives apparent temperature as a function of ambient air temperature and relative humidity. It assumes a wind speed of 5.6 miles per hour, pressure of 29.92 inches, and shade. Apparent temperatures may be used to indicate the heat stress likely to be experienced at different levels of physical activity, as shown in Table 3-3. Note that the degree of heat stress may vary with age, physical characteristics, and physiological condition.

TABLE 3-2 Apparent Temperature as a function of Air Temperature and Relative Humidity.

		RELATIVE HUMIDITY (%)																				
		0	5	10	15	20	25	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100
		125																				
		120	128																			
		117	122	131																		
		111	116	123	131	141																
		107	111	116	123	130	139	148														
		103	107	111	115	120	127	135	143	151												
		99	102	105	108	112	117	123	130	137	143	150										
		95	97	100	102	105	109	113	118	123	129	135	142	149								
		91	93	95	97	99	101	104	107	110	115	120	126	132	138	144						
		87	88	90	91	93	94	96	98	101	104	107	110	114	119	124	130	136				
		83	84	85	86	87	88	89	90	91	93	95	96	98	100	102	106	109	113	117	122	
		78	79	80	81	82	83	84	85	86	87	88	89	90	91	93	95	97	99	102	105	
		73	74	75	76	77	77	78	79	79	80	81	81	82	83	85	86	86	87	88	91	
		69	69	70	71	72	72	73	73	74	74	75	75	76	76	77	77	78	78	79	79	
		64	64	65	65	66	66	67	67	68	68	69	69	70	70	70	70	71	71	71	72	

TABLE 3-3 General Heat Stress Index.

Apparent Temperature	Danger Category	Effects
80-90°	Caution	Fatigue possible with prolonged exposure and physical activity.
90-105°F	Extreme Caution	Sunstroke, heat cramps, and heat exhaustion possible with prolonged exposure and physical activity.
105-130°F	Danger	Sunstroke, heat cramps, and heat exhaustion likely. Heatstroke possible with prolonged exposure and physical activity.
>130°F	Extreme Danger	Heatstroke or sunstroke imminent.

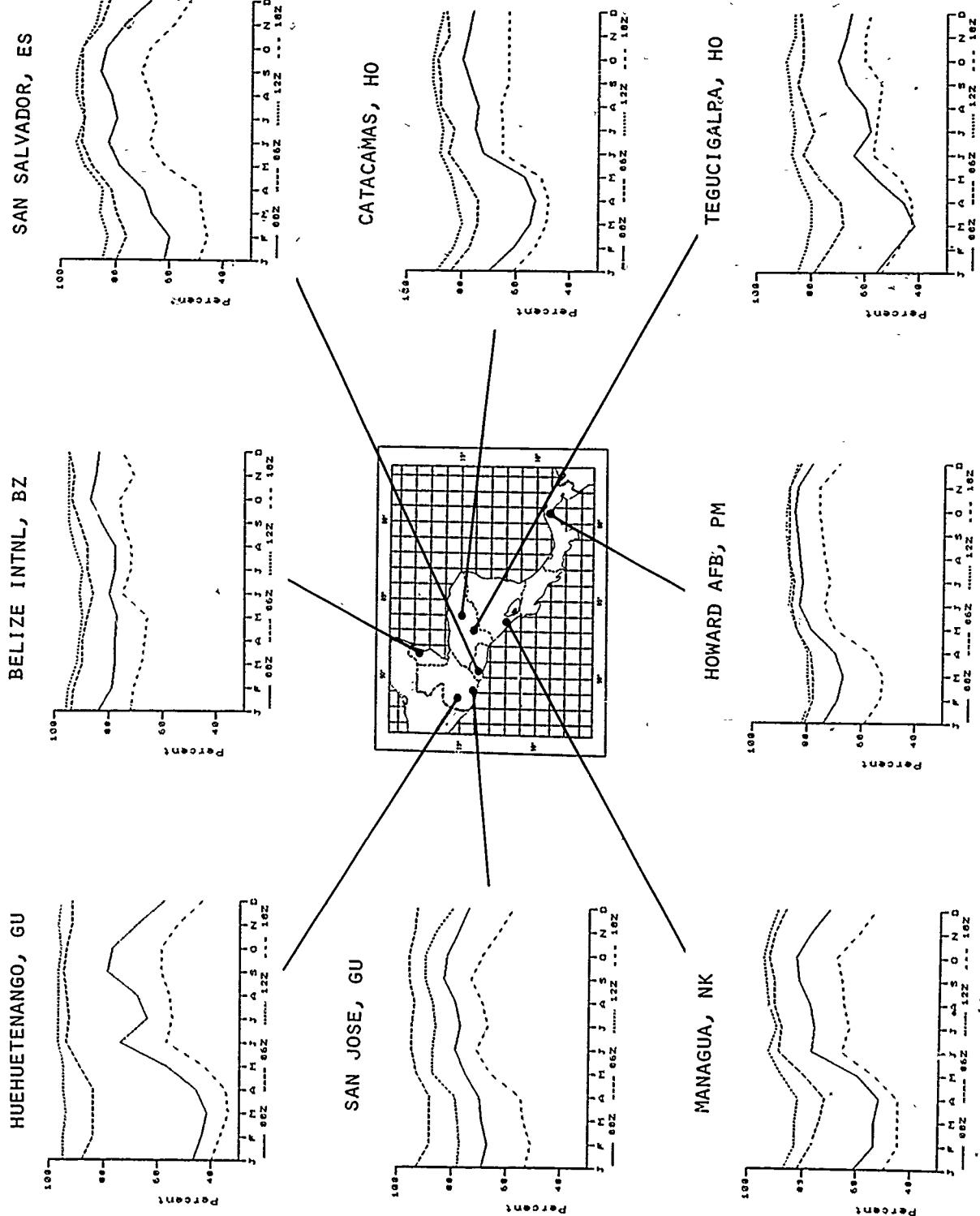


Figure 3-5 Mean Relative Humidity by Month and Time of Day, Selected Stations

3.3 Cloudiness.

3.3.1 General. Since cloudiness is strongly subject to local terrain features, it is difficult to discuss it in general terms. On the large scale, cloud cover correlates well with precipitation patterns, but specific locations may deviate significantly from the general situation. Away from the equatorial trough, there is much greater cloudiness over the Central American landmass than over adjacent waters. This results from orographic lifting of moisture-laden air carried in by on-shore trade winds and sea breezes. As a consequence, cumuliform clouds are predominant, with altocumulus, altostratus, and cirrus often resulting from the spreading of cumulonimbus tops during the wet season. During the dry season, the trade wind inversion restricts convective activity and fair weather cumulus abounds. Some stratiform clouds shroud the higher mountain peaks and are common in the valleys, where calm winds and cooler nighttime temperatures prevail.

Because of the predominance of the northeasterly trades, it is cloudier on the Caribbean side of the isthmus from Nicaragua north. There is little variation in cloudiness across Costa Rica and Panama, due in part to the narrowness of those countries' landmasses and their proximity to the equatorial trough.

3.3.2 Diurnal Variations. In general, cloud cover is least at night and in the morning, increasing during the day until early evening. This tendency is not strongly defined, however, and local influences often override the general pattern. Only in the southern parts of Nicaragua, Costa Rica, and Panama is this diurnal trend well established, but even then only during the dry season. In the dry season, areas along these Caribbean coasts have 6/10 or more cloud cover only 40 percent of the time at night, and 80 percent of the time during early afternoon. As noted earlier, the "dry" season in this region has only relative meaning.

3.3.3 Seasonal Variations. Seasonal changes in cloudiness are pronounced, and follow the same pattern as precipitation; i.e., December-March, dry; June-October, wet; April, May, and November, transitional. In the wet season, all of Central America is cloudy, with Panama, Costa Rica, and the Caribbean coast of southern Nicaragua extremely so. The northern countries and western Nicaragua will have $>6/10$ cloud cover 60 to 95 percent of the time, the remaining areas 80 to 100 percent of the time. The dry season shows a much greater degree of variation, with the Pacific sides of Guatemala, Honduras, El Salvador, and Nicaragua having 6/10 cloud cover 10 to 40 percent of the time. Belize and the rest of Honduras will experience these conditions 30 to 70 percent of the time; the Caribbean coast of Nicaragua and south, 35 to 85 percent of the time. Clear (less than 3/10 cloud cover) conditions are rare in the wet season, averaging only 5 to 25 percent of the time over most of Central America and only 0 to 10 percent of the time along the Caribbean coast and south. Although chances for clear conditions on this coast during the wet season are slim, the late-night and early morning hours offer a slightly better opportunity. During the dry season, clear conditions can be found 30 to 70 percent of the time over most of the region, but only 5 to 50 percent of the time to the south. See Charts A-32 through A-39, Tables B-16 and B-17.

3.3.4 Ceilings. In general, ceilings do not themselves present problems for airborne operations in Central America; i.e., rarely do low ceilings cover large geographic areas for extended periods. However, specific events (thunderstorms, squalls, orographic effects, etc.) cause occasional low ceilings which could become operationally significant.

Although ceilings less than 3,000 feet do occur in Central America, few stations experience them more than half the time. The two primary regions of low ceilings are the interior mountain ranges of Guatemala, Honduras, and Nicaragua, and the Caribbean coast from Nicaragua to Panama. Only isolated cases of ceilings less than 1,000 feet occur at most locations, and are usually associated with thunderstorms or heavy rain showers. This is particularly true during the afternoon and evening hours and applies to all of Central America. In fact, ceilings below 1,000 feet occur with any regularity, only in the mountains and in the Guatemalan interior, where stratiform clouds form as the result of nighttime cooling. See Charts A-8 through A-15, Tables B-11, B-12, and B-13.

3.4 Visibility. Visibilities are normally good throughout Central America, at least as far as most aviation operations are concerned. Visibilities less than 3 miles occur primarily in the mountains when nighttime stratiform clouds envelope them. Visibilities less than 1 mile occur less than 5 percent of the time in the afternoon and evening at most stations, but slightly more often in the early morning hours in the mountains. Visibility varies greatly depending on whether it is measured on the side of a mountain (near or in the clouds) or in the valleys below. Visibilities are of course reduced in storms, but these are generally short-lived and restricted to the wet season. Other local factors, such as the burning off of cane fields, restrict visibilities locally and seasonally. See Charts A-16 through A-23 and Tables B-14 and B-15.

3.5 Surface Winds. Three primary influences combine to affect local surface winds. These influences are the tradewinds, sea and land breezes, and mountain/valley winds. These primary controls are modified (or nullified) by migratory or mesoscale systems such as hurricanes/tropical storms, northerns, or individual thunderstorm cells. For the most part, mean wind speeds are less than 10 to 12 knots, lighter at night than during the day, and lighter in the wet season than in the dry season. From

late evening to early morning, calm winds prevail, occurring from 50 to 90 percent of the time at most stations. Seasonally, calm winds are at their minimum during the dry season. At some stations, this may mean that winds are calm only 50 percent of the time rather than 70 percent.

When winds are not calm, the east-northeasterly tradewinds prevail in the Caribbean and along the Caribbean coast. Good examples of the trades' dominance are Belize International Airport, Belize, and Islas del Cisne, Honduras (See Table B-9). Tela, Honduras, shows an apparently strong modification of the trades by a sea/land breeze regime. On the Pacific coast, especially on the coasts of Guatemala and El Salvador, the mountains effectively block the easterly trades and a sea/land breeze regime dominates. San Jose, Guatemala, and Acajutla, El Salvador, are good examples. Further south, evidence of the southwesterly monsoon winds behind the equatorial (monsoon) trough can be seen during the height of the wet season, when the trough is at its northernmost location. Wind directions at inland locations vary widely as they respond to local terrain features. Guatemala City, Guatemala, and San Jose, Costa Rica, (especially San Jose) are examples of stations that show higher mean speeds, probably the result of funneling (the "venturi effect") through mountain passes and valleys.

A squall-type phenomenon along the Pacific coast, referred to locally as the "Chubasco," occurs during the wet season. Strong, gusty thunderstorm-associated winds, sometimes exceeding gale force, form over the coastal mountains during late afternoon and move offshore in early evening as the sea breeze breaks and winds shift to the east-northeast. Other high winds occur in the vicinity of thunderstorms, in the mountains (because of the funneling effect), or when "northerns" come through. See Figure 2-1 and Tables B-9 and B-10.

3.6 Thunderstorms. Thunderstorms are a frequent phenomenon across Central America during the wet season. Surface convergence, warm water, and a hot tropical sun are primary factors for thunderstorm development and contribute to their frequency. Terrain also plays an important role in thunderstorm development. Terrain-induced modification of the moist on-shore flow, as well as convective activity south of the equatorial (monsoon) trough result in numerous thunderstorm days. Many coastal locations experience 12 to 20 thunderstorm days a month at the height of the wet season. See Figure 3-6.

There is always a high potential for thunderstorm development during the wet season. The greatest activity is between mid-afternoon and midnight. Satellite photos, however, show that thunderstorms continue to develop over the warm offshore waters after midnight. The photos also show a primary area for development over the Gulf of Mosquitos on the Caribbean side of Costa Rica and Panama. There is high potential for vertical development, and tops often extend to well over 50,000 feet. All the typical weather hazards associated with thunderstorms (gusty winds, lightning, turbulence, icing, etc.) are present, along with heavy rains and localized flooding.

Under normal conditions, thunderstorms are a wet season phenomenon. During the dry season, the strong atmospheric stability found above the tradewind inversion inhibits almost all vertical development. The occasional frontal system that crosses Central America may provide enough instability to produce a dry season thunderstorm. Vertical currents along the windward sides of mountains are occasionally strong enough to break through the inversion and produce a thunderstorm during the dry season.

Figure 3-6 shows the mean number of thunderstorm days by month for selected Central American stations. As noted earlier, thunderstorms are primarily wet season phenomena except for the Caribbean Islands and the Caribbean coast along the Nicaragua and Honduras border. The areas of heaviest activity are the Panama Canal Zone and the Pacific coastal area from northern Nicaragua northward. The area of lightest activity is found in the interior regions of Guatemala, Honduras, and Nicaragua. Note that the dual thunderstorm maxima on the Pacific coast side correlate well with the dual precipitation maxima mentioned in an earlier chapter.

3.7 Fog and Haze. In a general sense, fog is an infrequent occurrence in Central America. Most fog that does occur is from radiational nighttime cooling in mountain valleys, a type that dissipates rapidly with diurnal heating. During the wet season, fog may form after rainstorms in the tropical rain forests as these rainstorms add a significant amount of moisture to air already near saturation.

Haze is common at many locations in Central America, especially along the Caribbean coast. Major contributing factors are the easterly trades and the ready availability of salt particulates off the oceans. However, haze alone seldom lowers visibilities to below aircraft landing minimums.

3.8 Other Weather Information. Other combinations of weather data that may be of interest for specific applications are included in the appendices.

For paratroop operations, see Charts A-40 to A-47 and Tables B-8 to B-21.

For chemical operations, see Table B-22.

For Cloud-Free Line-of-Sight applications, see Tables B-23 and B-24.

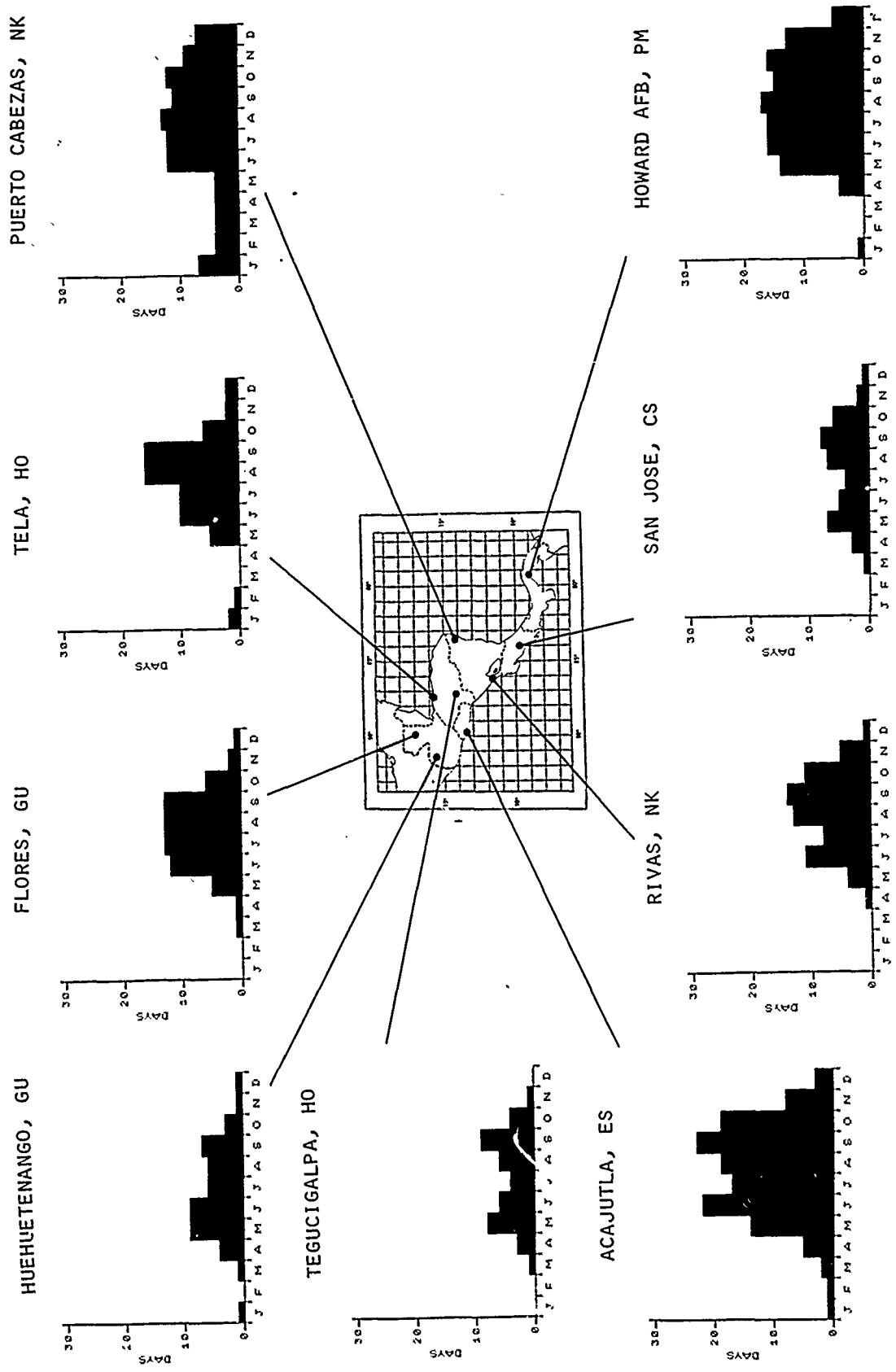


Figure 3-6 Mean Number of Thunderstorm Days by Month, Selected Stations

CHAPTER 4

Miscellaneous Environmental Data

4.1 Astronomical Data. Table 4-1 gives general astronomical data for 10 and 15 degrees north latitude. These data do not take terrain into account; consult current, detailed astronomical tables for precise values. Central America's longest and shortest days coincide with the 21 June and 21 December solstices, respectively. Because of its location south of 23° 27' north, the sun reaches its zenith over Central America twice: Once from mid- to late April as it travels north, and again in late August or early September as it returns to the south.

TABLE 4-1. Hours and Minutes of Daylight, Civil Twilight, and Astronomical Twilight at 10° and 15° North Latitude. Data are for 17th Day of each Month.

	JAN	FEB	MAR	APR	MAY	JUN
10°N Daylight	11:37	11:50	12:05	12:22	12:35	12:42
Civil Twilight	:22	:21	:21	:21	:22	:23
Astro Twilight	1:14	1:11	1:10	1:12	1:15	1:18
	JUL	AUG	SEP	OCT	NOV	DEC
10°N Daylight	12:38	12:26	12:09	11:53	11:40	11:32
Civil Twilight	:23	:22	:21	:21	:22	:23
Astro Twilight	1:16	1:12	1:10	1:10	1:13	1:15
15°N Daylight	12:56	12:36	12:11	11:47	11:25	11:14
Civil Twilight	:23	:22	:21	:22	:23	:23
Astro Twilight	1:19	1:14	1:11	1:12	1:15	1:17

4.2 Tidal Data. Tides are worth mentioning because of the significant tidal differences between the Caribbean and Pacific sides of the isthmus. On the Caribbean side, tidal variations are very small, generally with only 1 to 3 foot differences between low and high. On the middle and northern Pacific coasts, however, such as at La Union, El Salvador, and Puntarenas, Costa Rica, the difference between low and high tide may be as much as 7 to 9 feet. At Balboa, Panama, the change can be as much as 12 to 14 feet. Consult local tide tables for exact dates, times, and locations in question.

4.3 Seismic Activity. Earthquakes are fairly common in Central America. Quakes of 5.0 or greater on the Richter Scale have been recorded in Guatemala, Honduras, El Salvador, and Costa Rica since 1976. Historically, earthquakes have caused more life and property losses than any other natural phenomenon in Central America. Probably the most significant effect of seismic activity on military operations would be the frequent quake-induced landslides that block roads and mountain passes.

BIBLIOGRAPHY

- Alpert, Leo, "The Intertropical Convergence Zone of the Eastern Pacific Region," AMS Bulletin, Vol. 27(1), pp. 15-29, January 1946.
- Atkinson, Gary D., and James C. Sadler, Mean Cloudiness and Gradient-Level Wind Charts over the Tropics, Volume I, Text, AWS TR 215, Volume I, 1970.
- Atkinson, Gary D., and James C. Sadler, Mean Cloudiness and Gradient-Level Wind Charts Over the Tropics, Volume II, Charts, AWS TR 215, Volume II, 1970.
- Atkinson, Gary D., Forecasters' Guide to Tropical Meteorology, AWS TR 240, 1971.
- Ayoade, J.O., Introduction to Climatology for the Tropics, John Wiley and Sons, Inc., New York, 1983.
- Barrett, E.C., Climatology from Satellites, Methuen and Co., Ltd., London, 1974.
- Belmont, A.D., D.G. Dartt, and G.D. Nastrom, "Variations of Stratospheric Zonal Winds, 20-65km, 1961-1971," Journal of Applied Meteorology, Vol. 14(4), pp. 585-594, June 1975.
- Chapel, L.T., "Winds and Storms on the Isthmus of Panama," Monthly Weather Review, Vol. 55 (12), pp. 519-530, December 1927.
- Chary, Henry A., Atlas of Mean Sea Level Pressure, USAFETAC TN-82/007, November 1982
- Control Hidalgo Anos 1952-1963, Republica de Nicaragua, Ministerio de Fomento Y OO.PP, Comision Nacional de Energia.
- Craig, Richard A., The Upper Atmosphere, Meteorology and Physics, Academic Press, New York, 1965.
- Datos Meteorologicos Mensuales, Hast 1959 Inclusive, Comite Coordinator de Hidrologia Y Meteorologia de Guatemala, 1968.
- Dodd, A.V., Areal and Temporal Occurrence of High Dew Points and Associated Temperatures, Report TF-70-4-ES, US Army Natick Laboratories, Natick, 1969.
- Earthquake Information Bulletin, US Department of the Interior Geological Survey, Vol. 14(4)(6), 1982; Vol. 13(2), 1981; Vol 11(1), (3), 1979.
- Gramzow, R.H., and W.K. Henry, "The Rainy Periods of Central America," Journal of Applied Meteorology, Vol. 11(4), pp. 637-642, June 1972.
- Griegorten, I.I., "A Simplified Method of Estimating Extreme Values from Data Samples," Journal of Applied Mech., 2, pp. 82-89.
- Hastenrath, Stefan, and Peter J. Lamb, Climatic Atlas of the Tropical Atlantic and Eastern Pacific Ocean, The University of Wisconsin Press, Madison, 1977.
- Honduras Temperature and Precipitation, Oficina de Climatologia Servicio Meteorologico Nacional, Direccion General de Aeronautica Civil Honduras, 1962.
- Landsberg, H.E., World Survey of Climatology Volume 12, Climates of Central and South America, Elsevier Scientific Publishing Co., Amsterdam, 1976.
- List, Robert J., Smithsonian Meteorological Tables, 6th Revised Ed., Smithsonian Institute, Washington, DC, 1951.
- McBryde, F. Webster, "Studies in Guatemalan Meteorology I and II," AMS Bulletin, Vol. 23, pp. 254-263 and 400-406, 1942.
- National Intelligence Survey, Central America, Weather and Climate, Central Intelligence Agency, 1969.
- Nicaragua, A Country Study, Department of the Army, DA Pamphlet 550-88, 1982.
- Pallman, Albert J., The Synoptics, Dynamics and Energetics of the Temporal Using Satellite Radiation Data (in addition to conventional observations), Second Year's Report #2 for ESSA, St Louis University, St Louis, Missouri, 1968.

- Ramage, C.S., et al, Meteorological Atlas of the 1972-73 El Nino, University of Hawaii, Honolulu, Hawaii, 1980.
- Revised Uniform Summary of Surface Weather Observations (Howard AFB, Panama), USAFETAC, OL-A, Asheville, North Carolina, 1981.
- Riehl, Herbert, Climate and Weather in the Tropics, Academic Press, New York, 1979.
- Riordan, P., Weather Extremes Around the World, Technical Report 70-45-ES, US Army Natick Laboratories, Natick, 38p., 1970.
- Roth, Harold S., Intertropical Convergence Zone Meteorology, The John Hopkins University, Silver Springs, Maryland, Report, 23p., 1958."
- Sadler, James C., "The Monsoon Circulation and Cloudiness over the GATE Area," Monthly Weather Review, Vol. 103(5), pp. 369-387, May 1975.
- Sadler, James C., The Upper Tropospheric Circulation Over the Global Tropics, University of Hawaii, Honolulu, Hawaii, 1975.
- Steadman, R.G., "The Assessment of Sultriness, Part I: A Temperature-Humidity Index Based on Human Physiology and Clothing Science," Journal of Applied Meteorology, Vol. 18(7), pp. 861-873.
- Steadman, R.G., "The Assessment of Sultriness, Part II: Effects of Wind, Extra Radiation and Barometric Pressure on Apparent Temperature," Journal of Applied Meteorology, Vol. 18(7), pp. 874-885.
- Steinhauser, F., Climatic Atlas of North and Central America, World Meteorological Organization, Geneva, 1979.
- Strahler, Arthur N., Physical Geography, 3rd Ed., John Wiley and Sons, Inc., New York, 1969.
- Summary of Mean and Extreme Temperatures for 24 Stations in Costa Rica, 1960-1969, Microfiche, Ministerio de Agricultura Y Ganaderia, Servicio Meteorologico de Costa Rica.
- Tattleman, P.I., N. Sissenwine, and R.W. Lenhard, Jr, World Frequencies of High Temperature, AF Cambridge Research Laboratory Report 69-0348, ERP 305, 30 p., Cambridge, 1969.
- The 1980 Hammond Almanac, Time-Hammond Almanac, Inc., Maplewood, NJ, 1980.
- The Meteorological Glossary, Chemical Publishing Company, Inc., Brooklyn, NY, 1940.
- The World Almanac and Book of Facts, 1982, Newspaper Enterprise Association, Inc., New York, 1982.
- Tide Tables 1982, High and Low Water Predictions, Central and Western Pacific Ocean and Indian Ocean, NOAA, 1981.
- Tropical Cyclones of the North Atlantic Ocean, 1871-1980, US Department of Commerce, NOAA Environmental Research Laboratories, 1981.
- U.S. Navy Marine Climatic Atlas of the World--Vol. 1-North Atlantic Ocean, US Department of Commerce, National Climatic Center, Asheville, North Carolina, 1974.
- Weiss, Martin, "The Humisery and other Measures of Summer Discomfort," Reprint from National Weather Digest.
- Wernstedt, Frederick L., World Climatic Data, Climatic Data Press, Lemont, Pennsylvania, 1972.
- Whipple, A.B.C., Storm, Time-Life Books, Inc., Chicago, Illinois, 1982.
- World Weather Records, 1951-60, Volume 3, South America, Central America, West Indies, The Caribbean and Bermuda, U.S. Department of Commerce, EDS, 1966.
- World Weather Records, 1961-70, Volume 3, West Indies, South and Central America, US Department of Commerce, NOAA, 1982.

APPENDIX A

Contoured Charts

The contoured charts in this appendix were produced to show major patterns such as areas of maxima and minima. They do not reflect mesoscale features. Users should refer to tables in Appendix B and to detailed topographic charts for data relating to specific times or locations.

As a general rule, the surface charts presented in this appendix are for the months of February, May, August, and November. These months were selected because February and August are centered in the dry and wet seasons, respectively, while May and November most closely represent transitional periods. An exception to these selections is in the precipitation charts, which are for March (the driest month), October (the wettest month), and "Annual."

Since the mid-season months of January, April, July, and October are representative of winter, spring, summer, and fall, respectively, they were selected for upper air chart presentations.

Specifically, charts are presented as follows:

Mean Precipitation: March, October, "Annual"

Mean Temperature: February, May, August, November

Ceiling: February, May, August, November: Hours 00Z and 12Z

Visibility: Same as ceiling

Sky Cover: Same as ceiling, but hours 06Z and 18Z

Paradrop: Same as ceiling

Relative Humidity: Same as ceiling

Mean Upper Air Circulation: Winter, Spring, Summer, Fall, (January, April, July, October)

CHART A-1 Dry Month Precipitation (March)

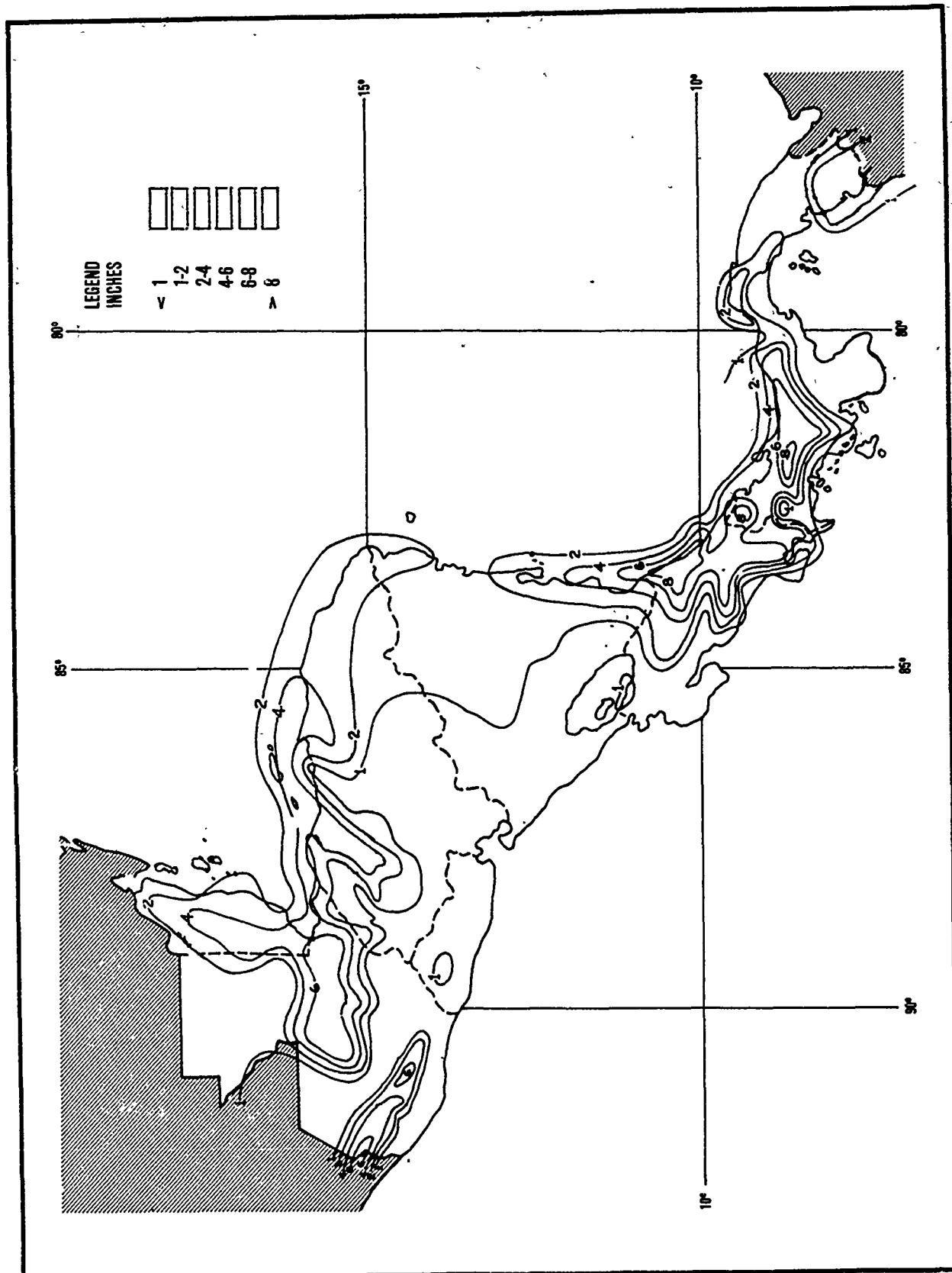


CHART A-2 Wet Month Precipitation (October)

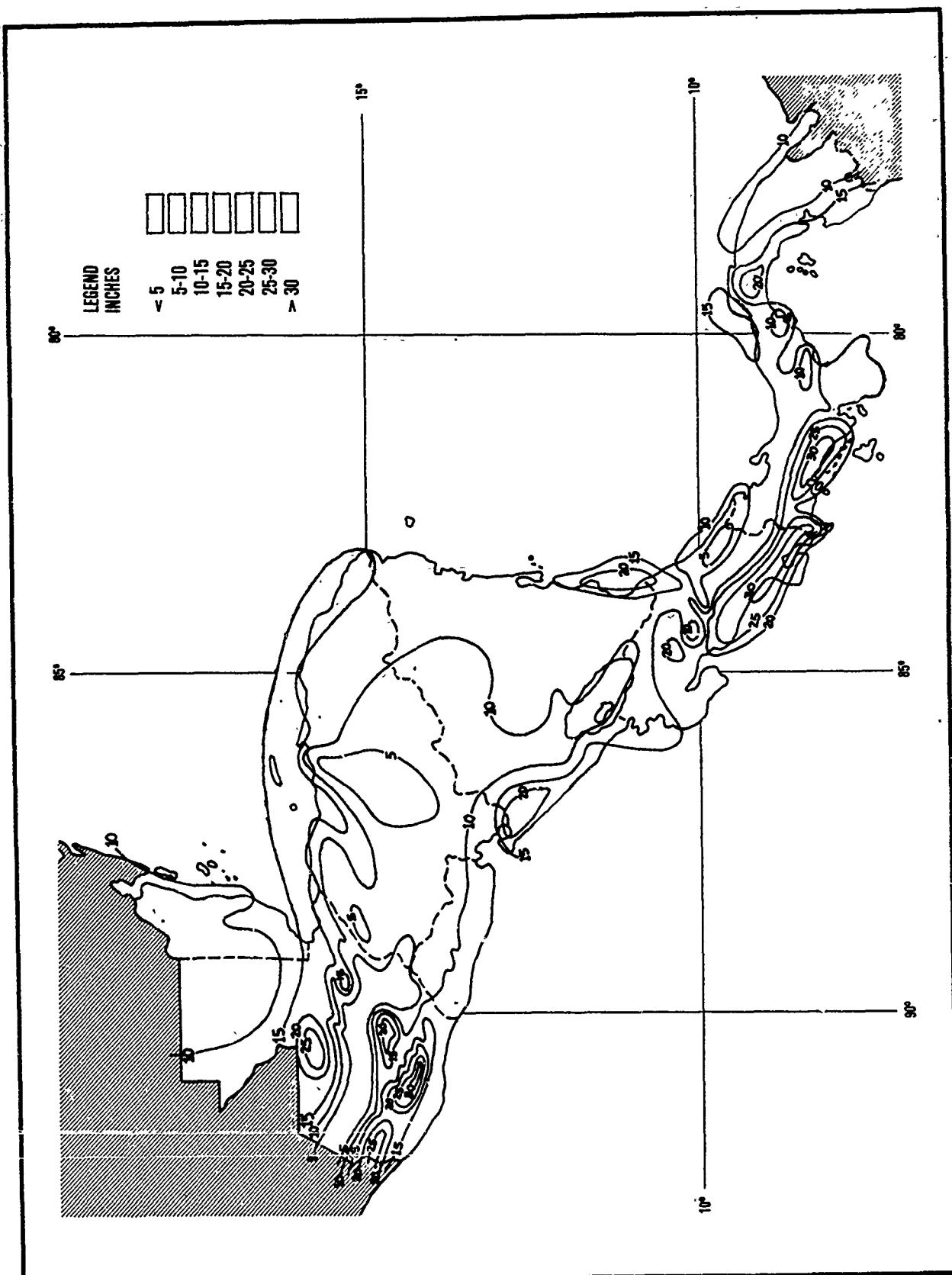


CHART A-3 Mean Annual Precipitation

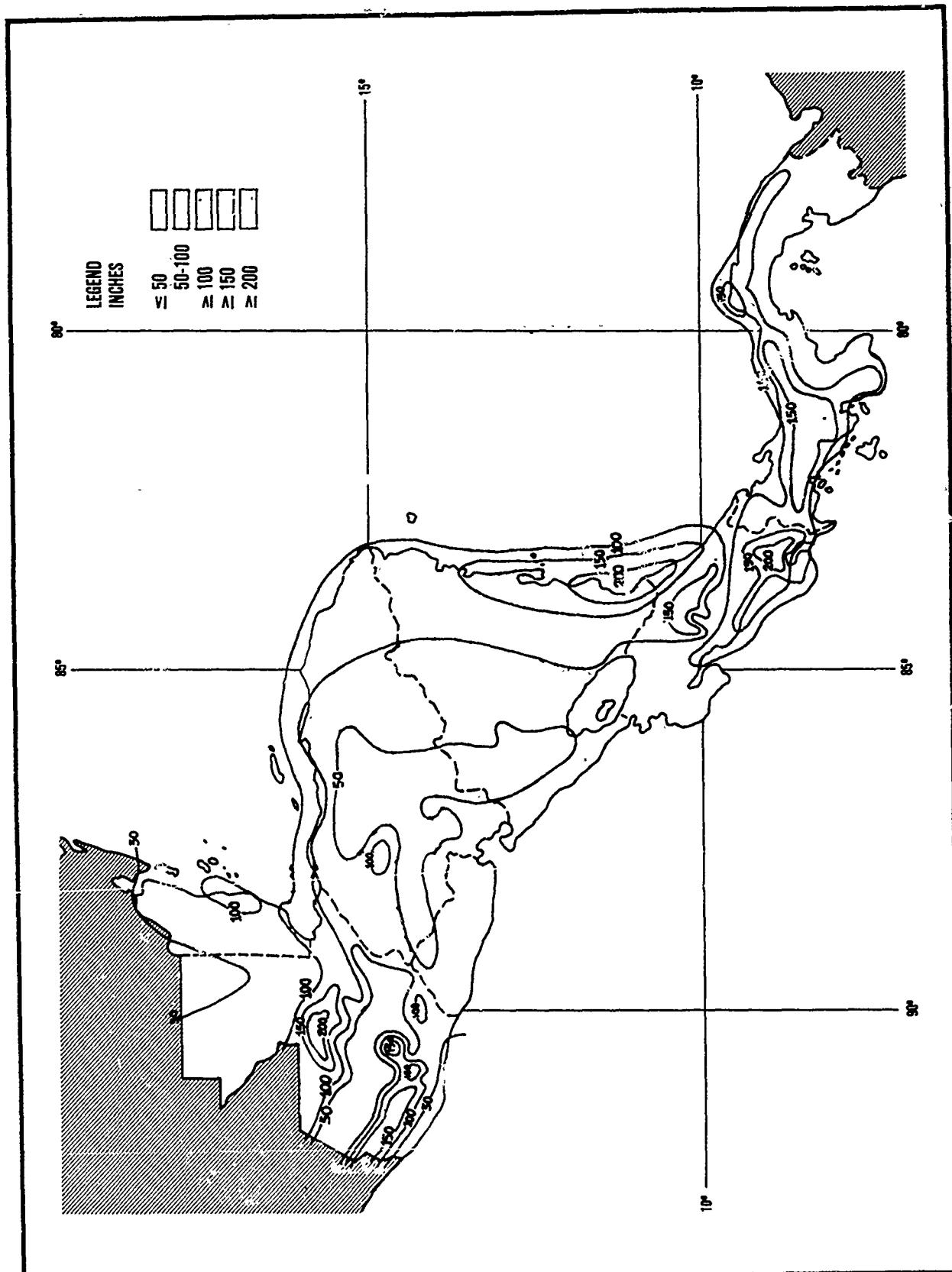
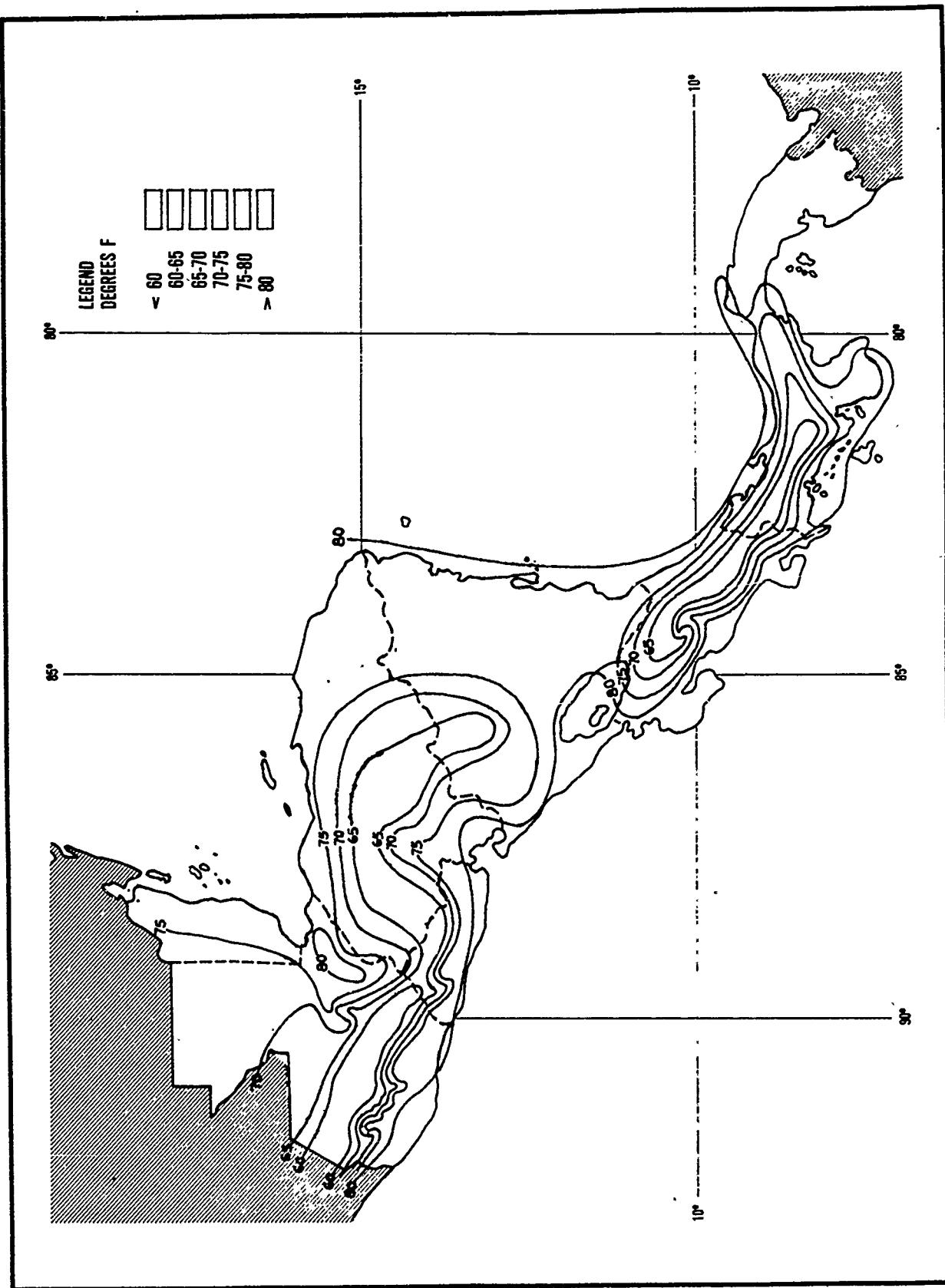


CHART A-4 Mean Monthly Temperature, February



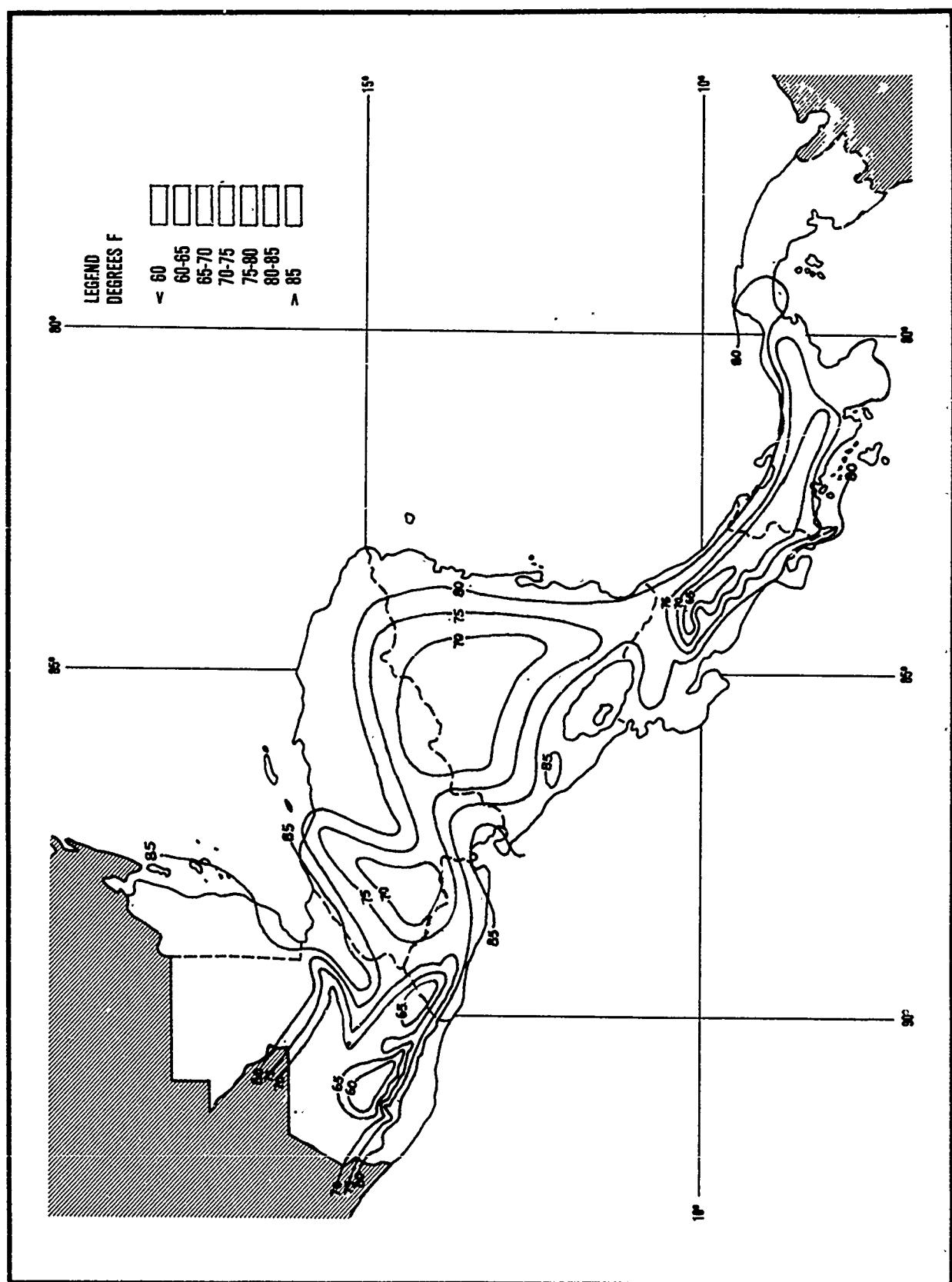


CHART A-6 Mean Monthly Temperature, August

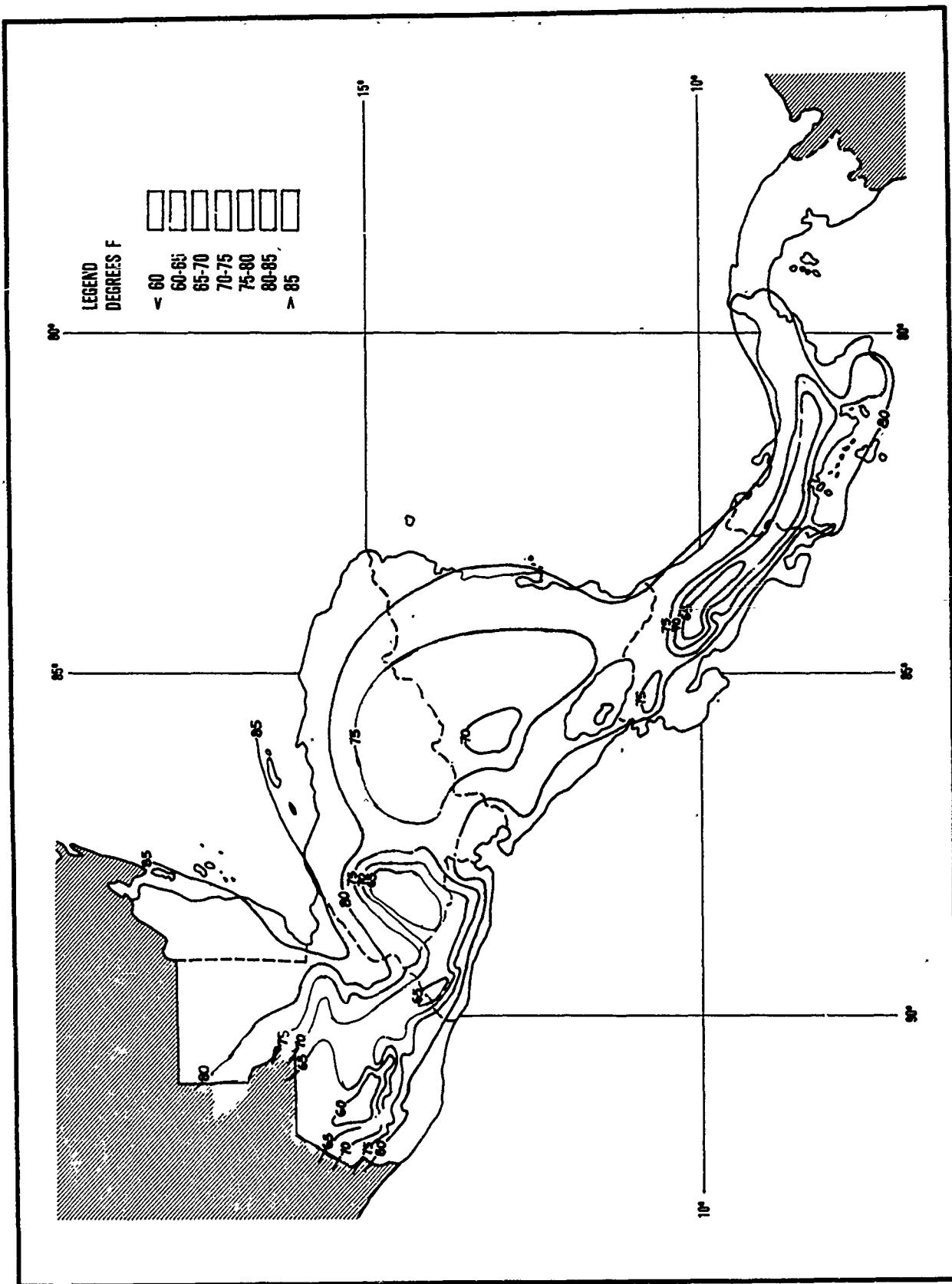
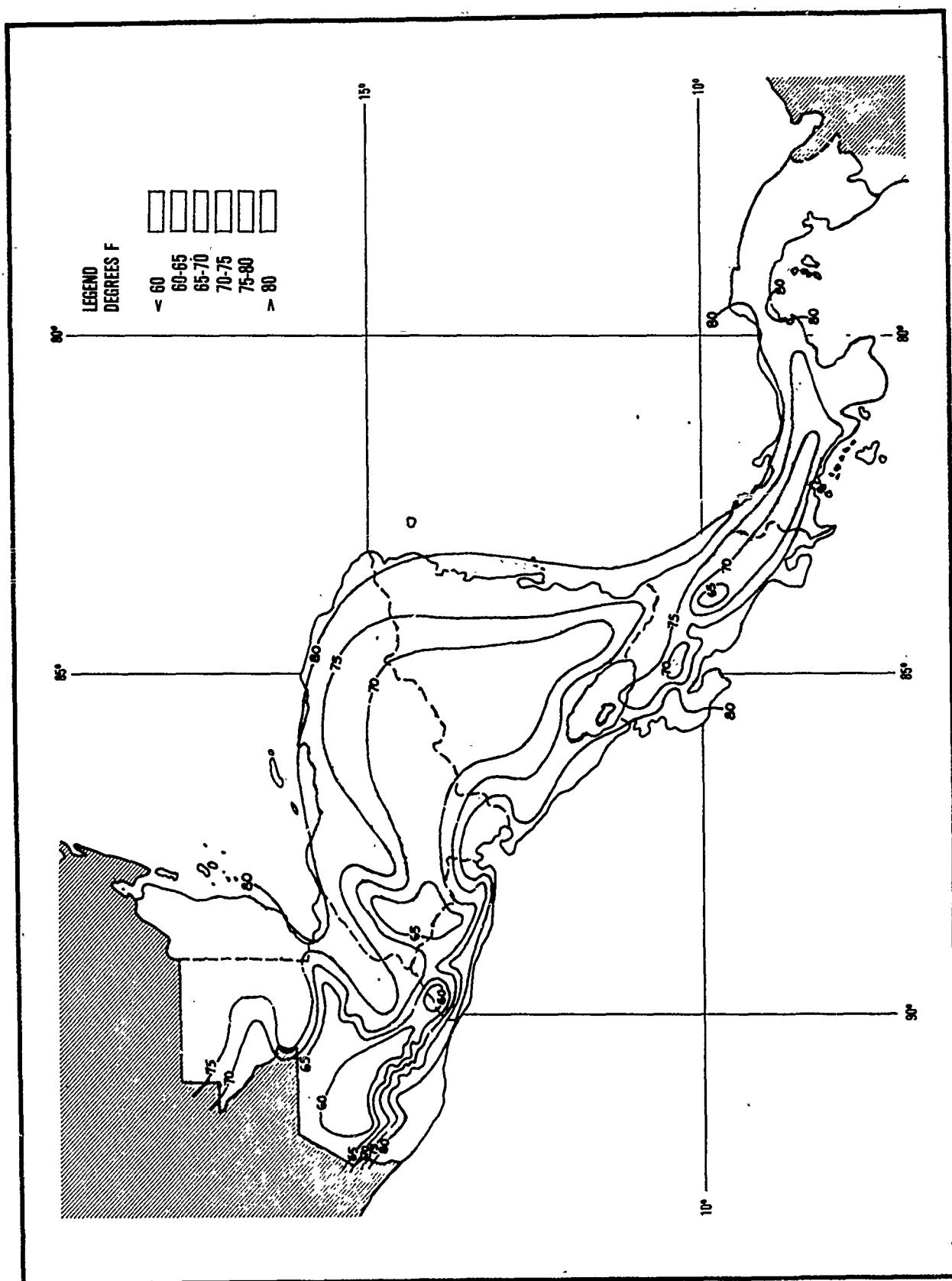
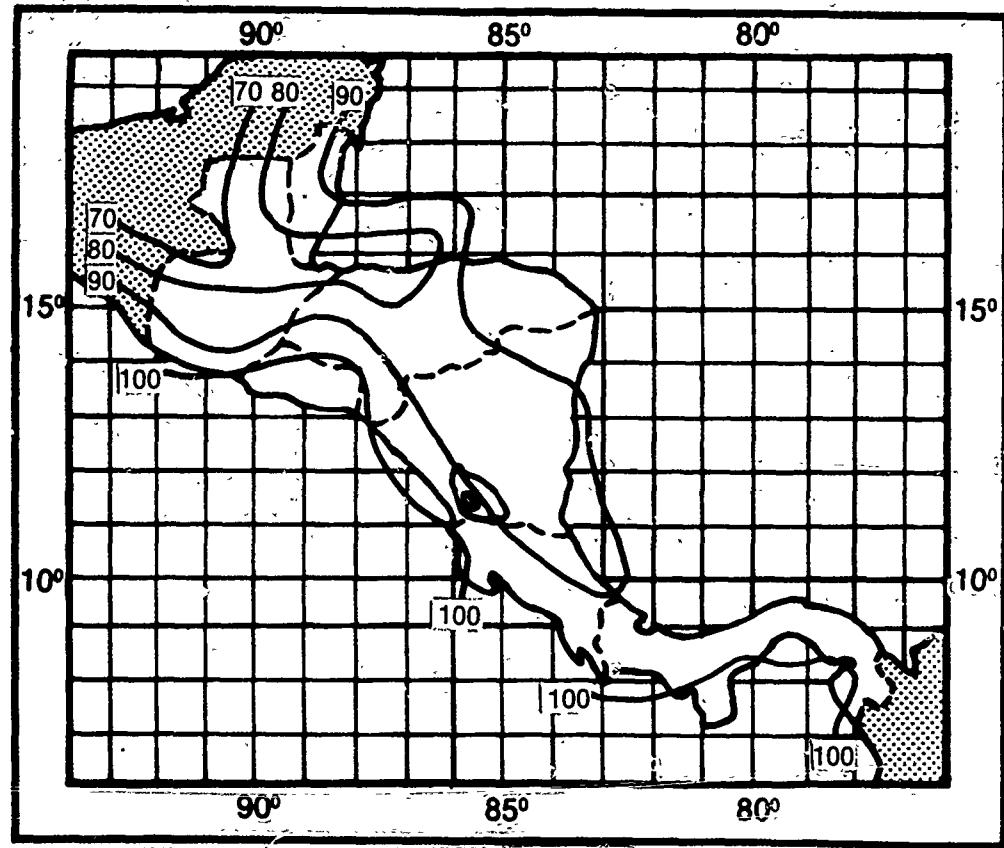
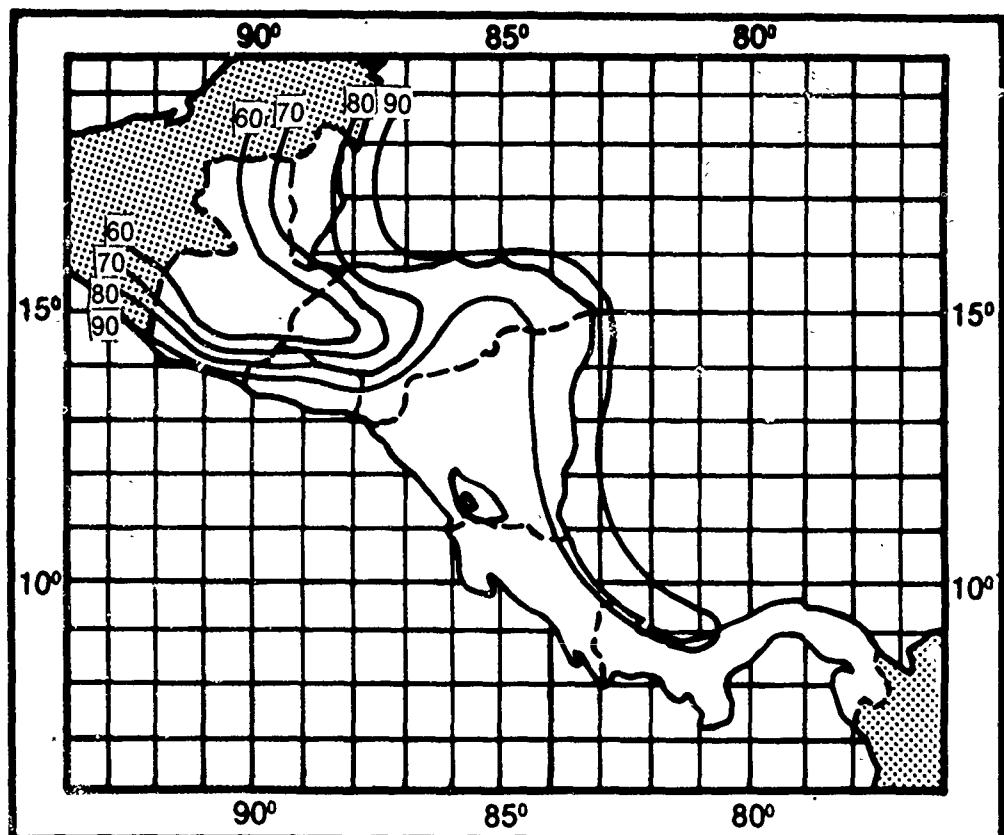


CHART A-7 Mean Monthly Temperature, November

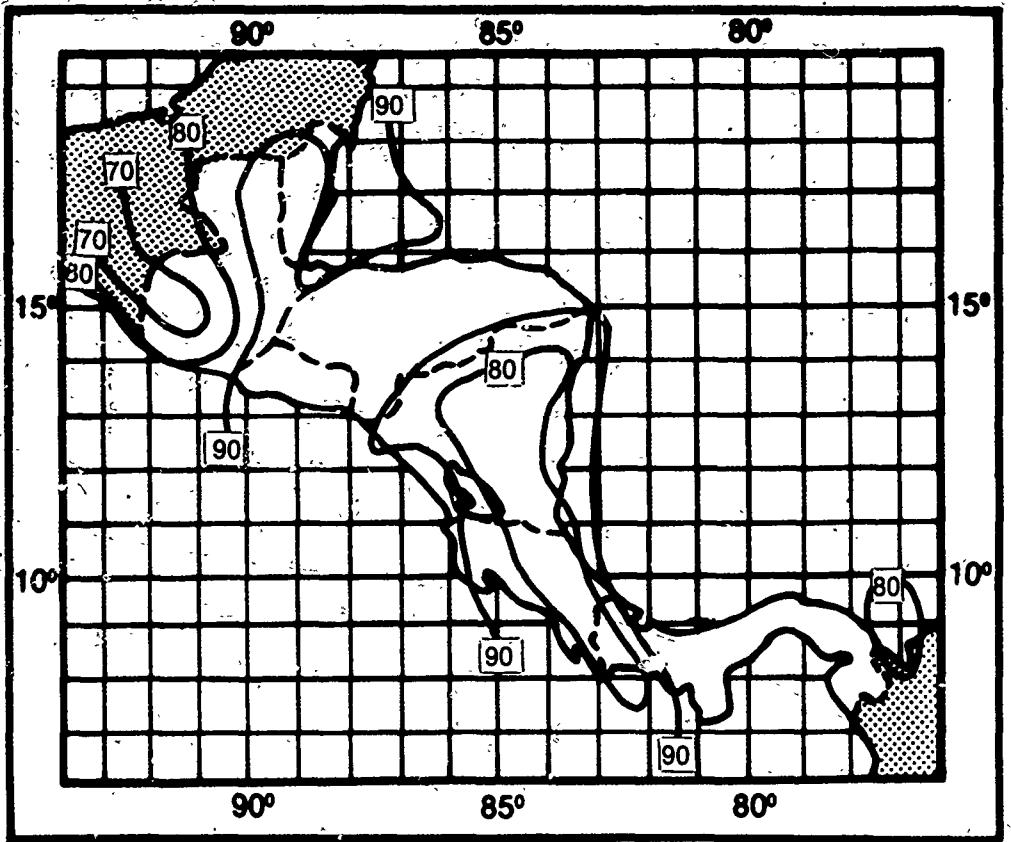




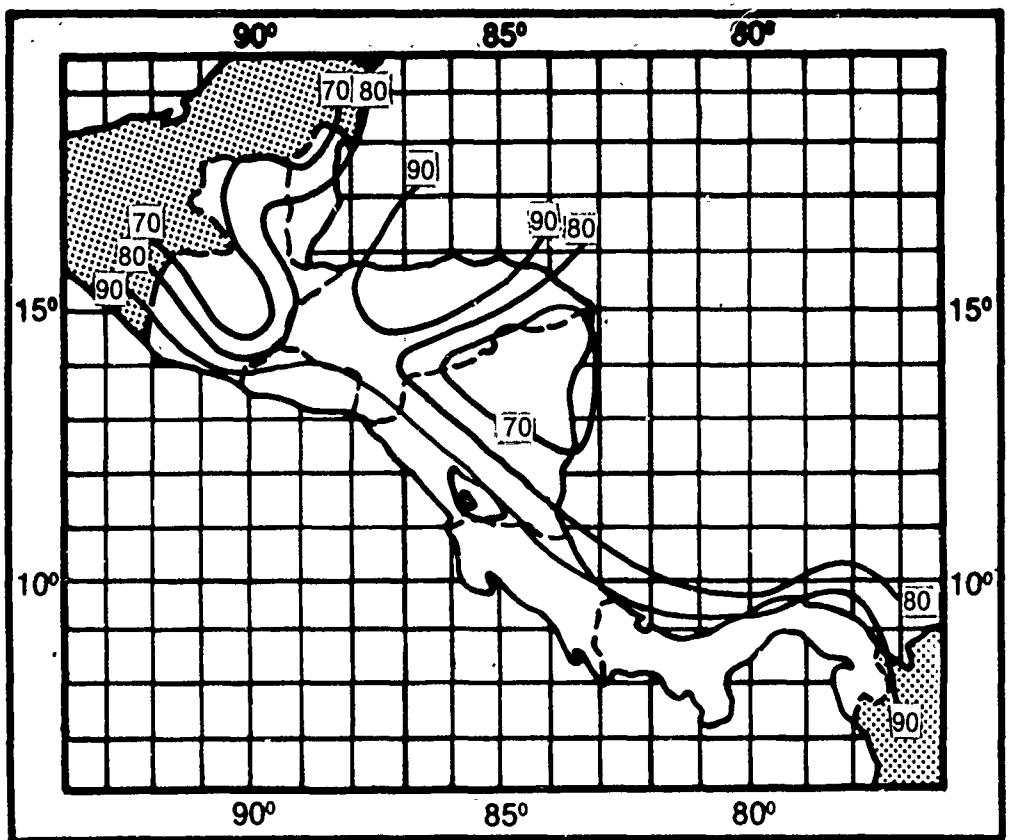
**CHART A-8 Percent Frequency of Occurrence,
Ceilings $> 3,000$ ft, February, 00Z**



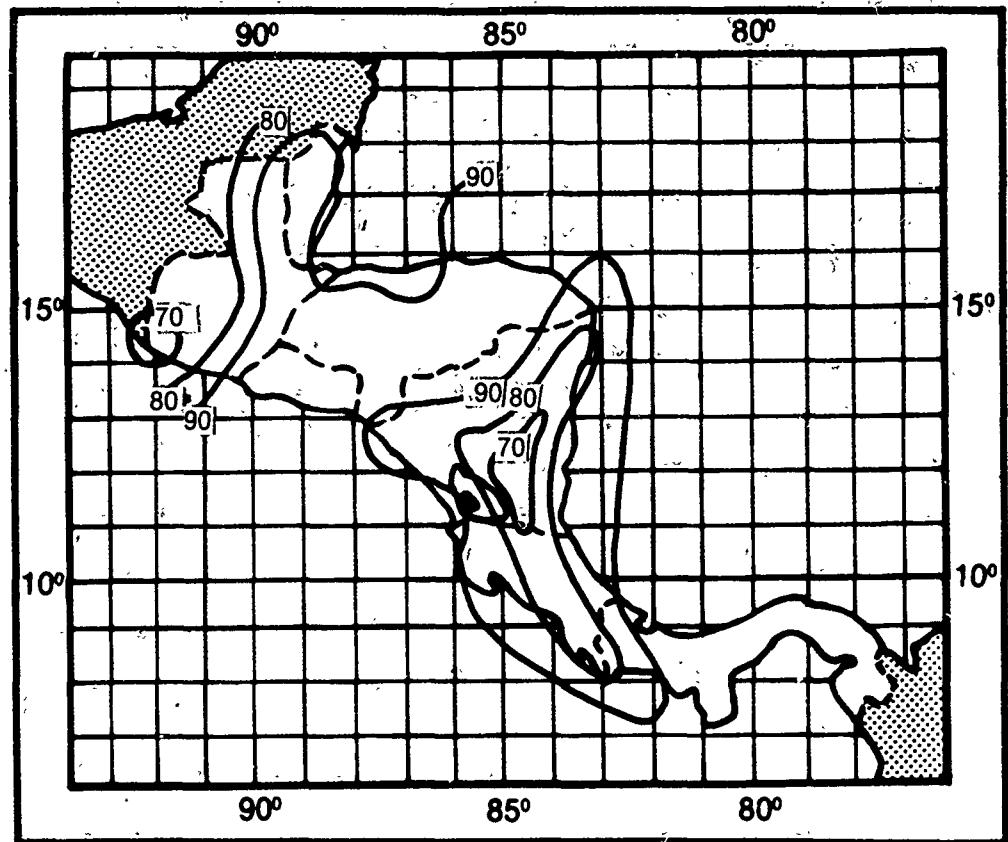
**CHART A-9 Percent Frequency of Occurrence,
Ceilings $> 3,000$ ft, February, 12Z**



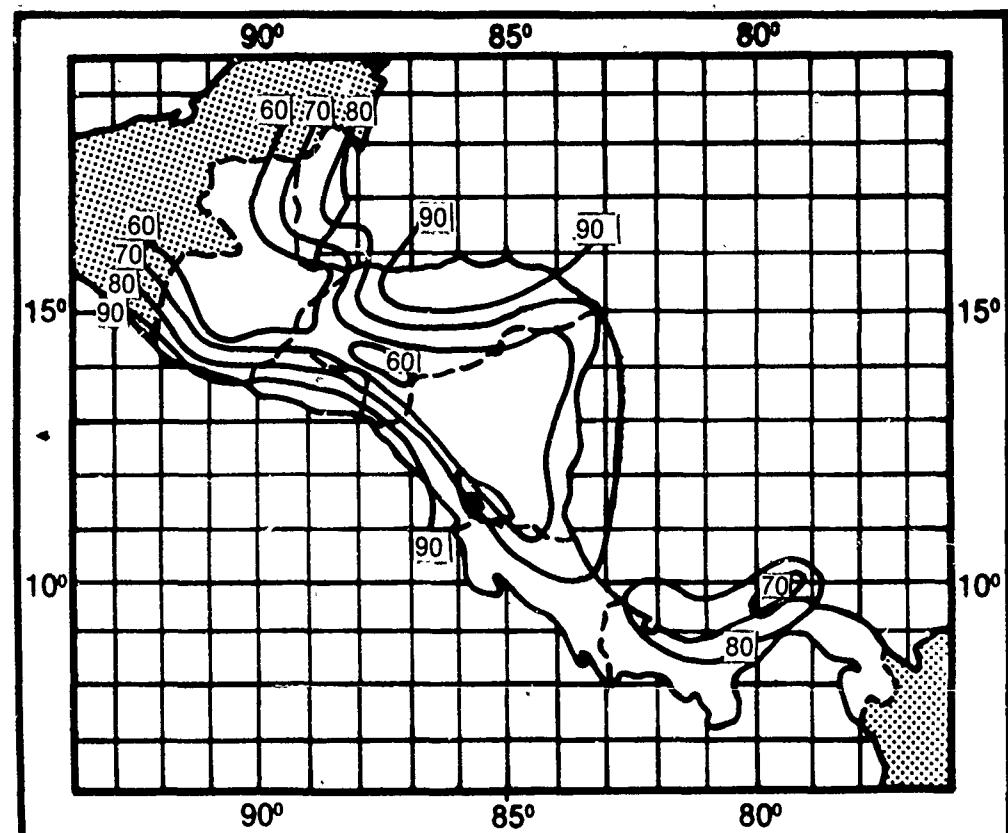
**CHART A-10 Percent Frequency of Occurrence,
Ceilings $> 3,000$ ft, May, 00Z**



**CHART A-11 Percent Frequency of Occurrence,
Ceilings $> 3,000$ ft, May, 12Z**



**CHART A-12 Percent Frequency of Occurrence,
Ceilings \geq 3,000 ft, August, 00Z**



**CHART A-13 Percent Frequency of Occurrence,
Ceilings \geq 3,000 ft, August, 12Z**

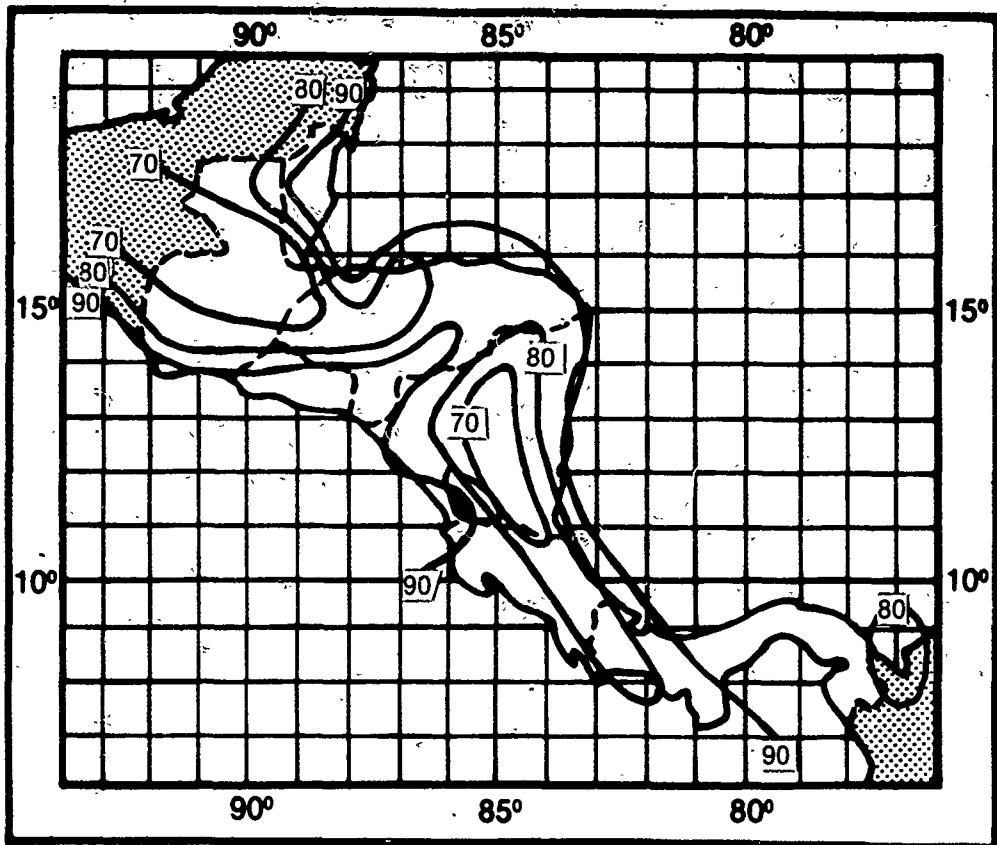


CHART A-14 Percent Frequency of Occurrence,
Ceilings $>$ 3,000 ft, November, 00Z

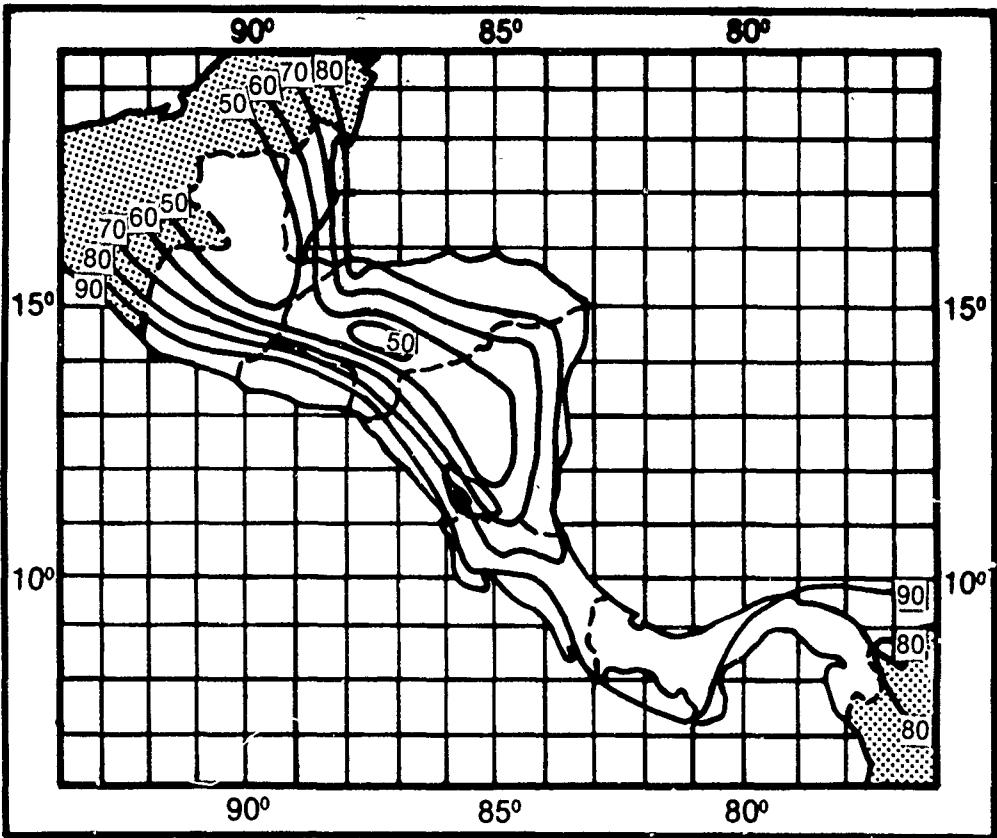


CHART A-15 Percent Frequency of Occurrence,
Ceilings $>$ 3,000 ft, November, 12Z

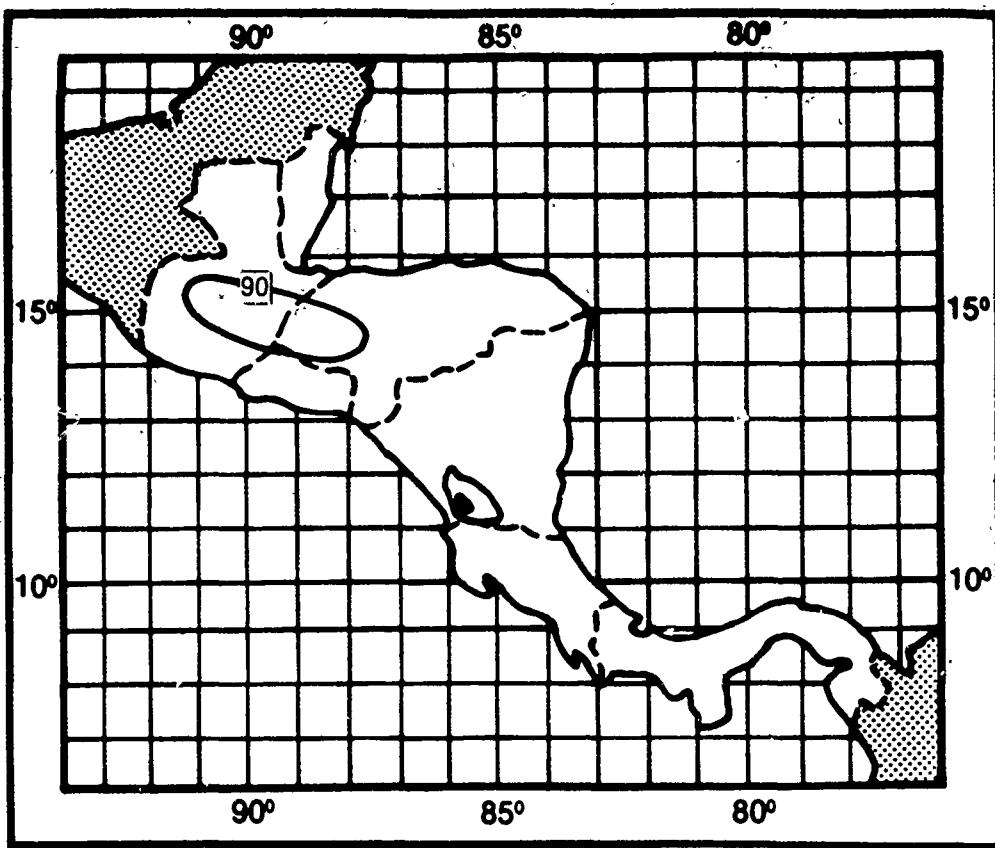


CHART A-16 Percent Frequency of Occurrence,
Visibility $>$ 3 Miles, February, 00Z

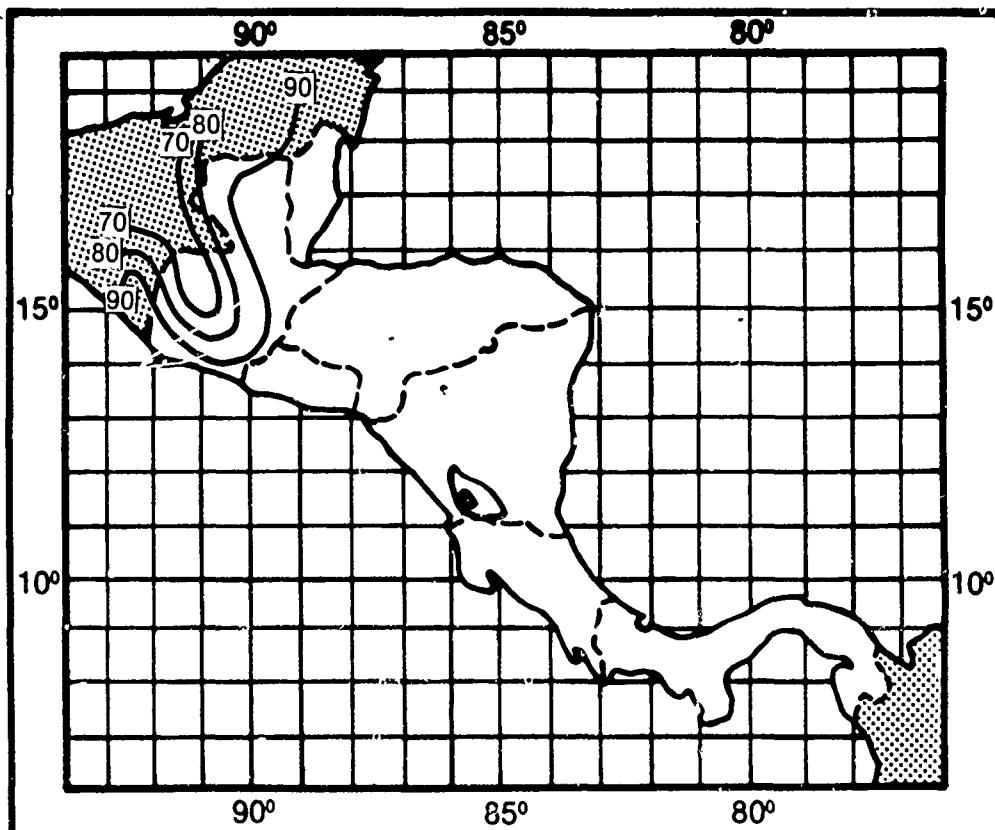


CHART A-17 Percent Frequency of Occurrence,
Visibility $>$ 3 Miles, February, 12Z

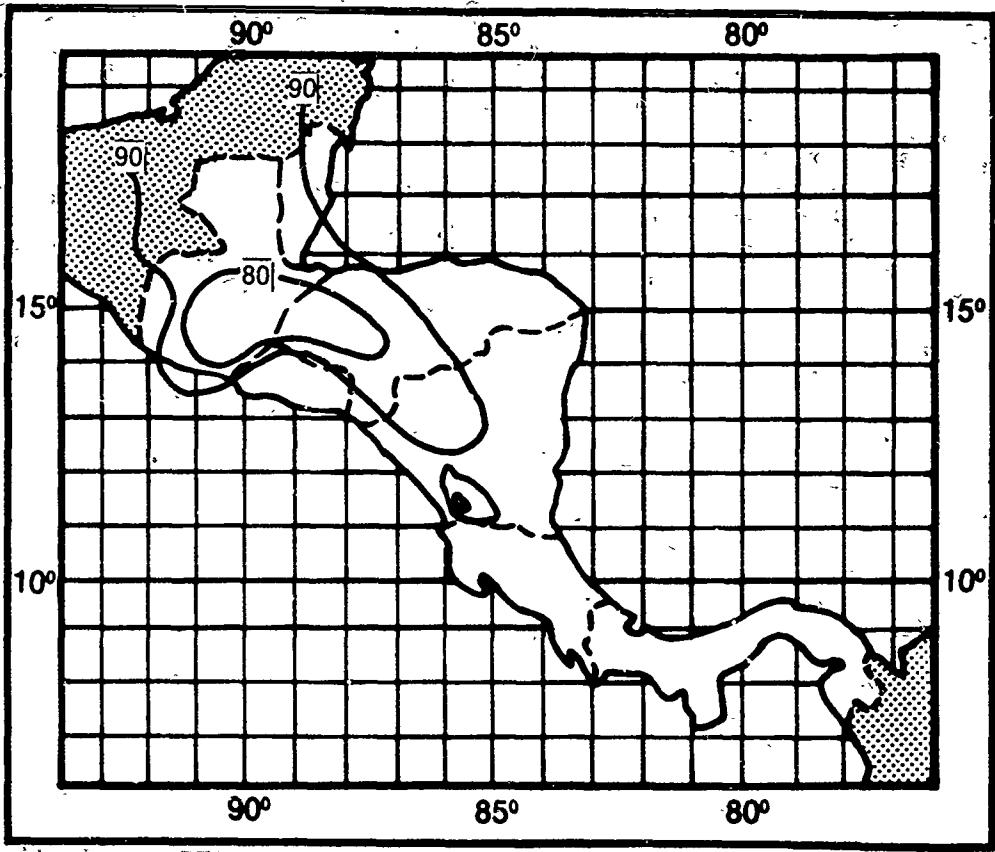


CHART A-18 Percent Frequency of Occurrence,
Visibility $>$ 3 Miles, May, 00Z

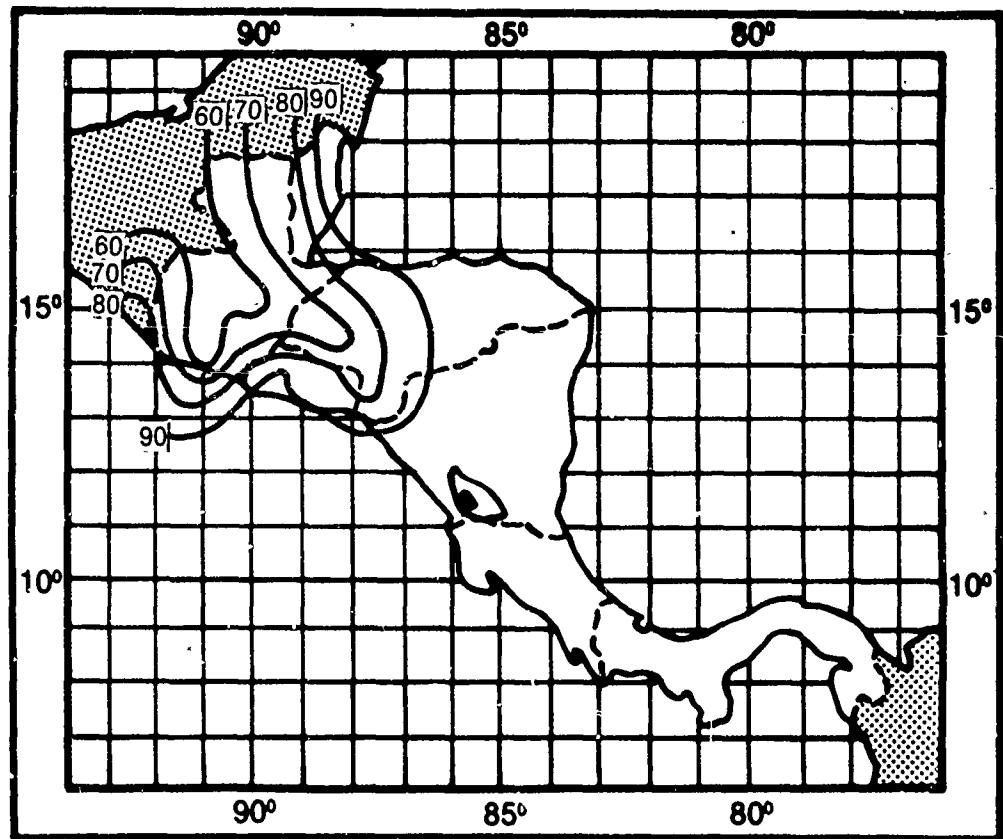


CHART A-19 Percent Frequency of Occurrence,
Visibility $>$ 3 Miles, May, 12Z

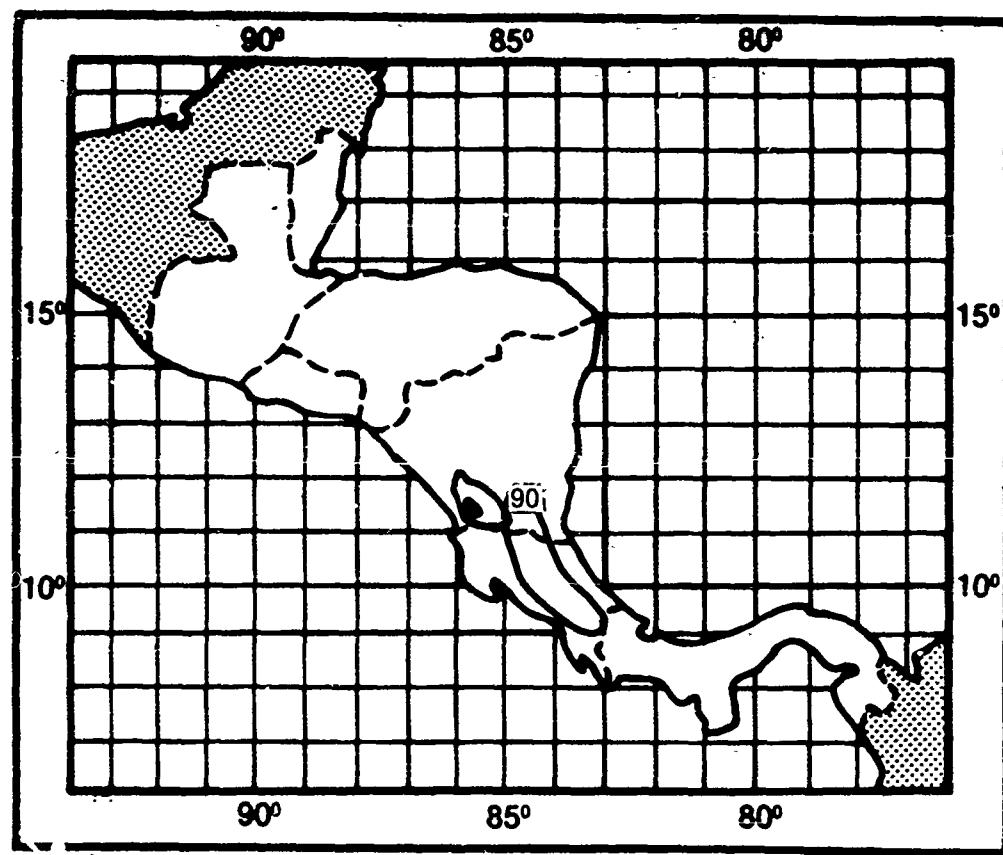


CHART A-20 Percent Frequency of Occurrence,
Visibility \geq 3 Miles, August, 00Z

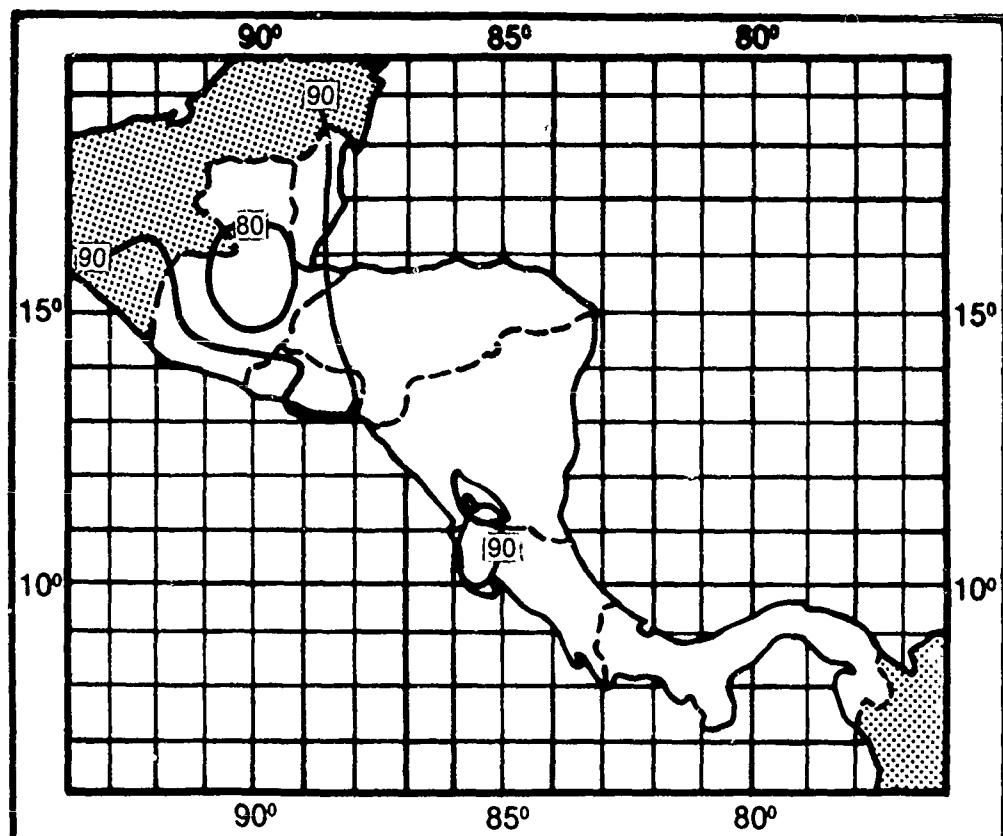


CHART A-21 Percent Frequency of Occurrence,
Visibility \geq 3 Miles, August, 12Z

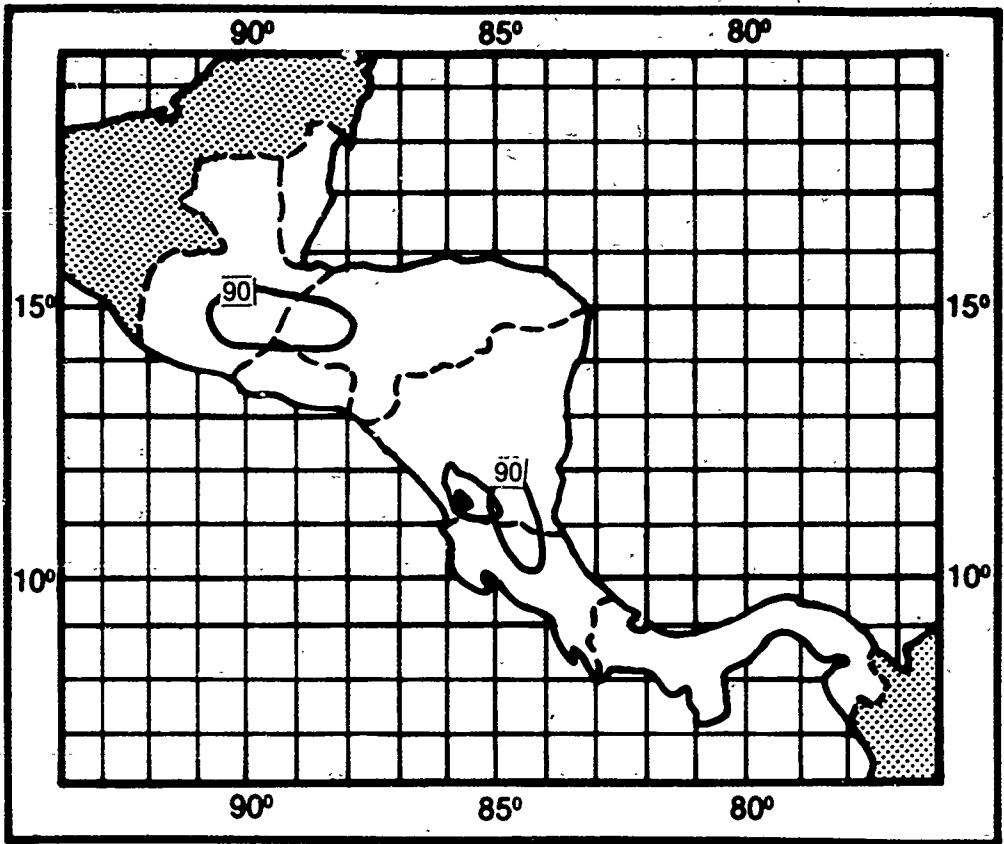


CHART A-22 Percent Frequency of Occurrence,
Visibility $>$ 3 Miles, November, 00Z

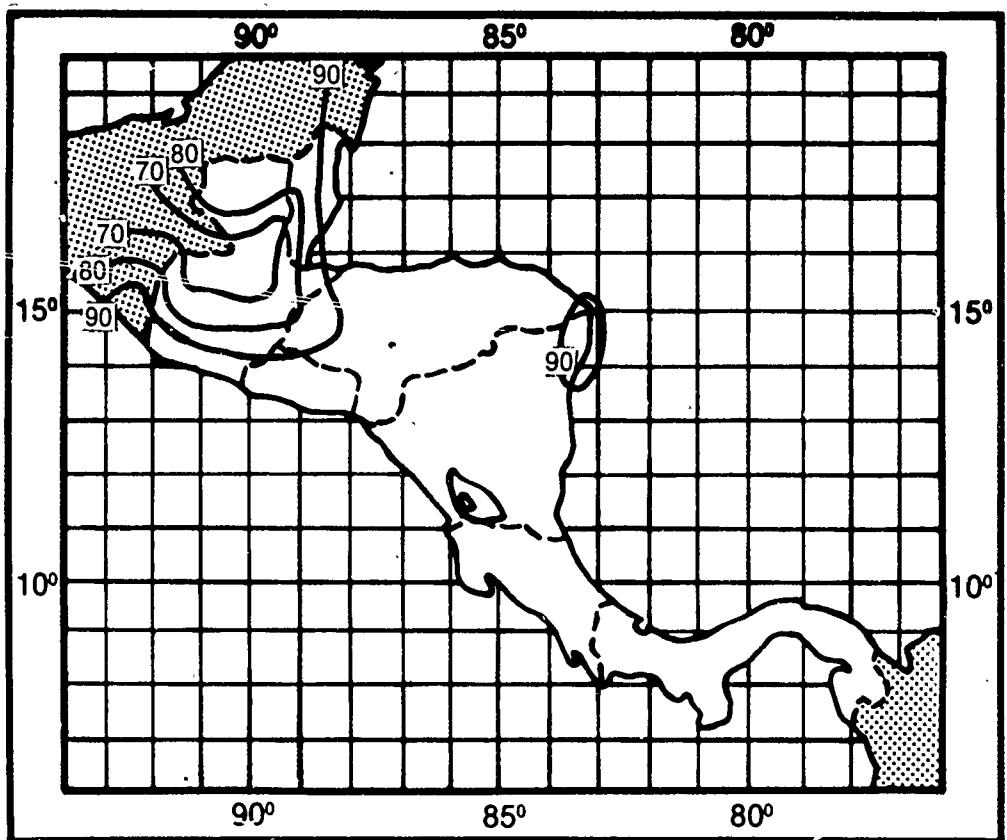


CHART A-23 Percent Frequency of Occurrence,
Visibility $>$ 3 Miles, November, 12Z

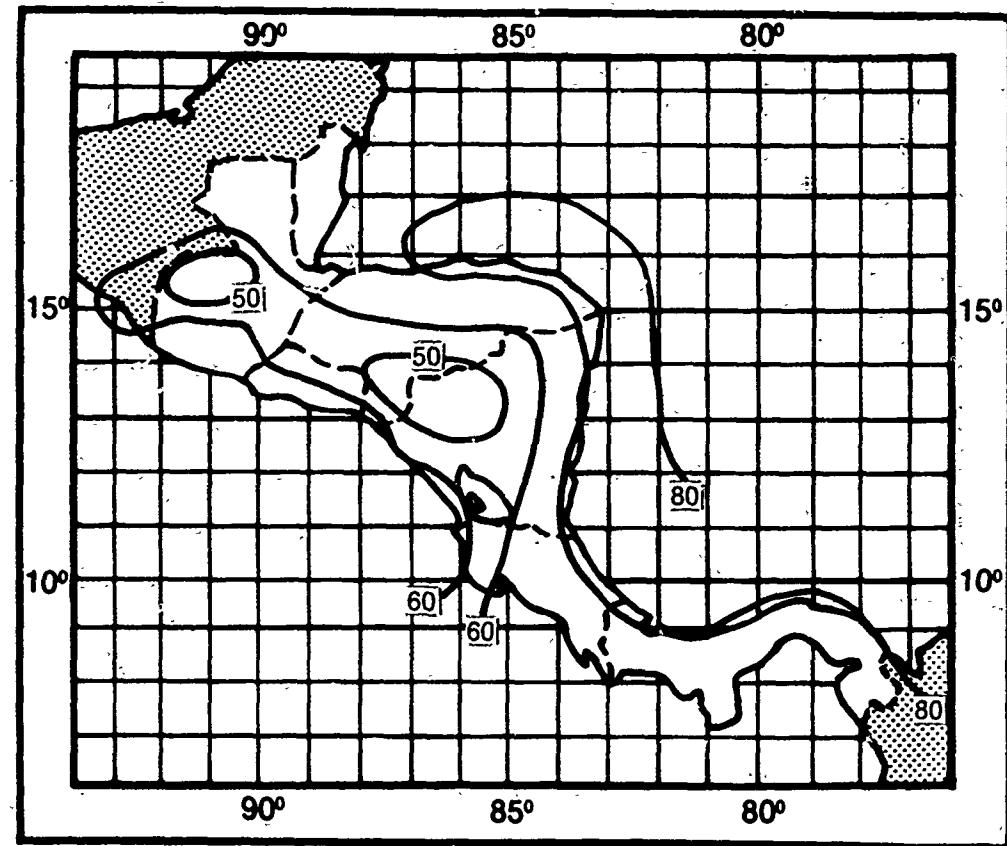


CHART A-24 Mean Relative Humidity, February, 00Z

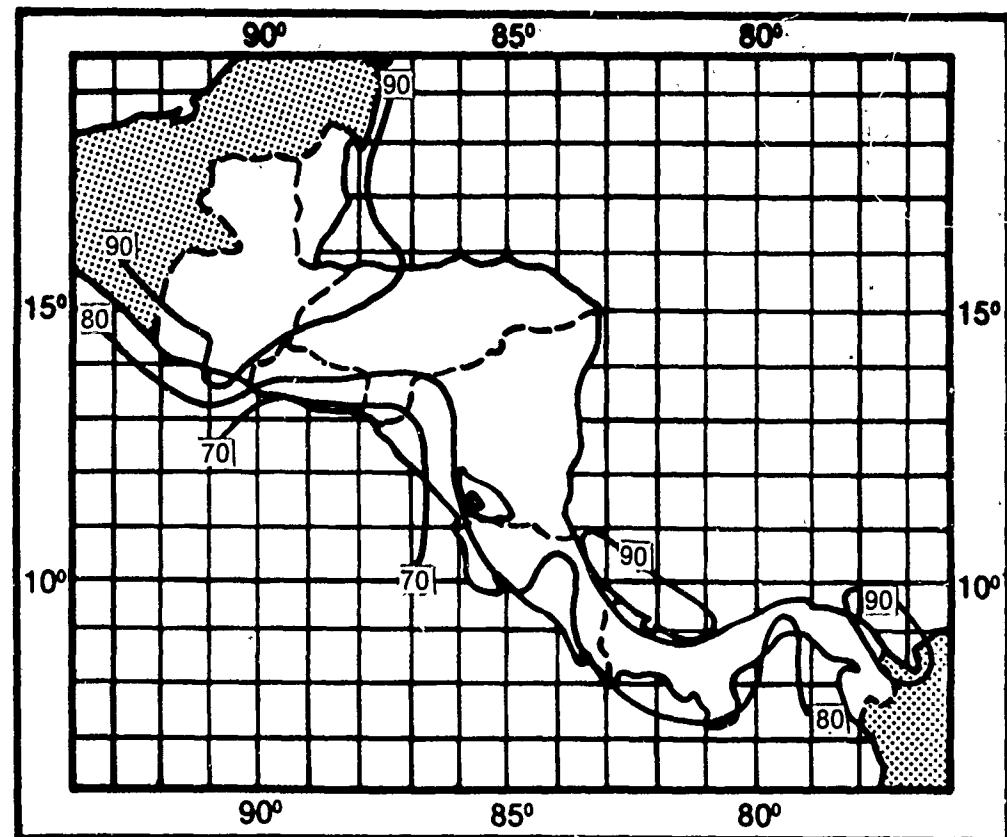


CHART A-25 Mean Relative Humidity, February, 12Z

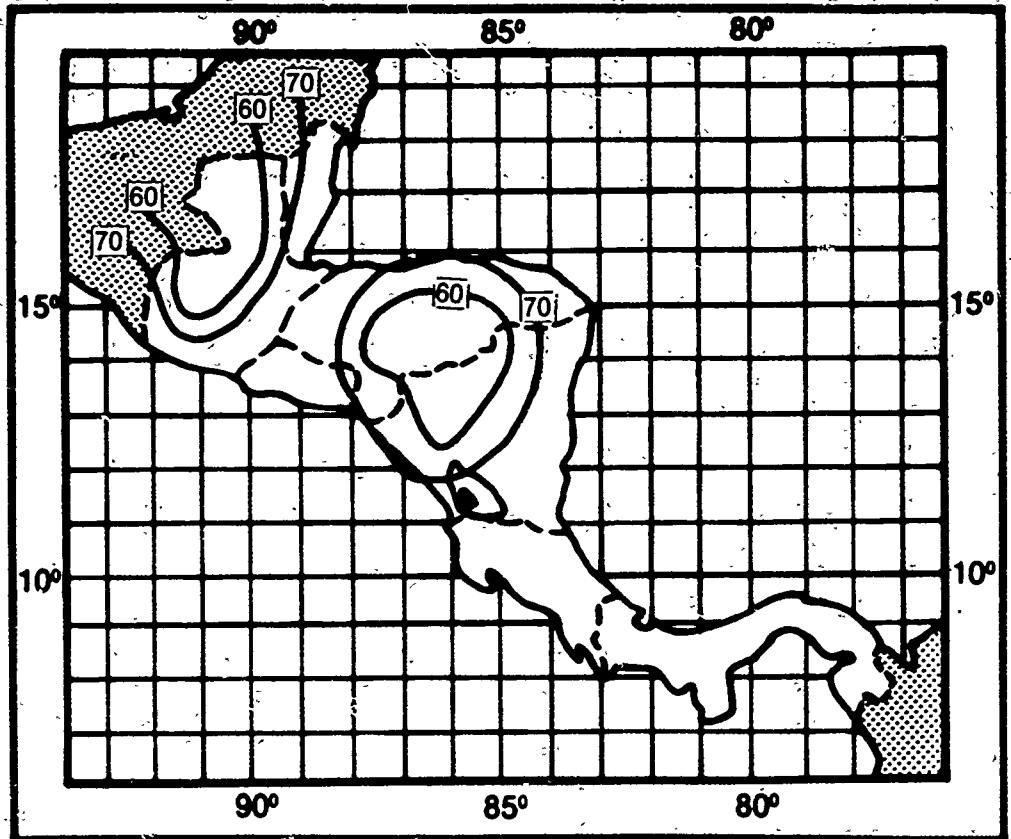


CHART A-26 Mean Relative Humidity, May, 00Z

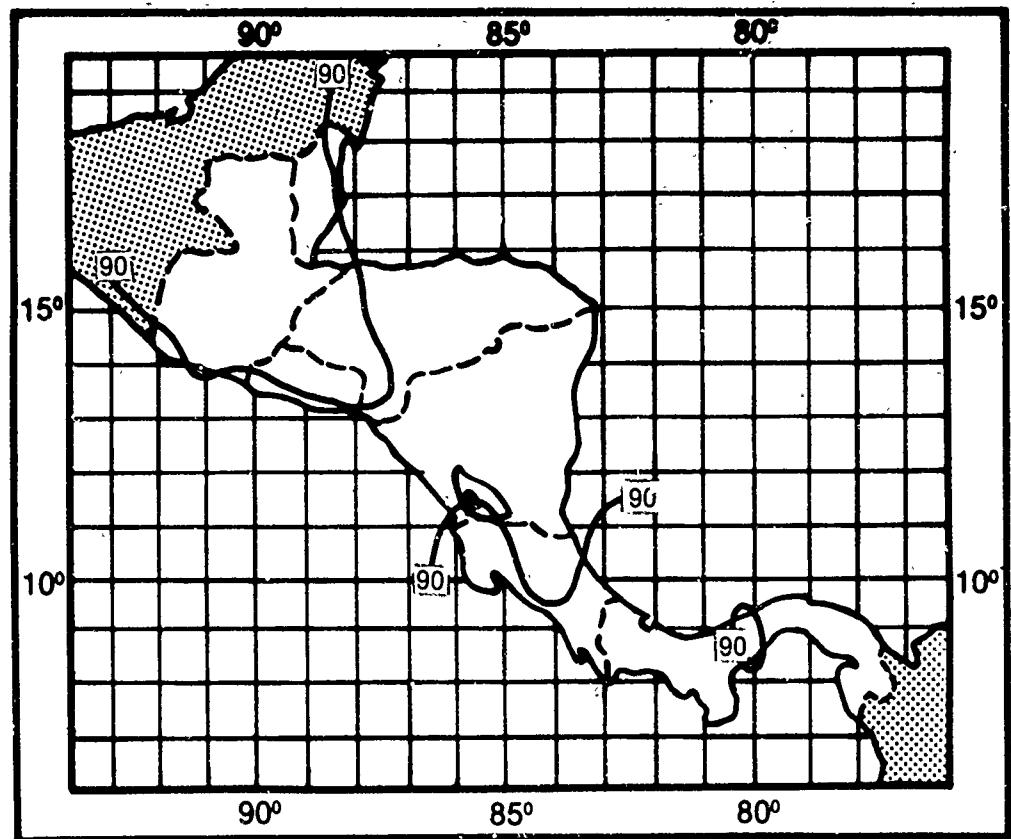


CHART A-27 Mean Relative Humidity, May, 12Z

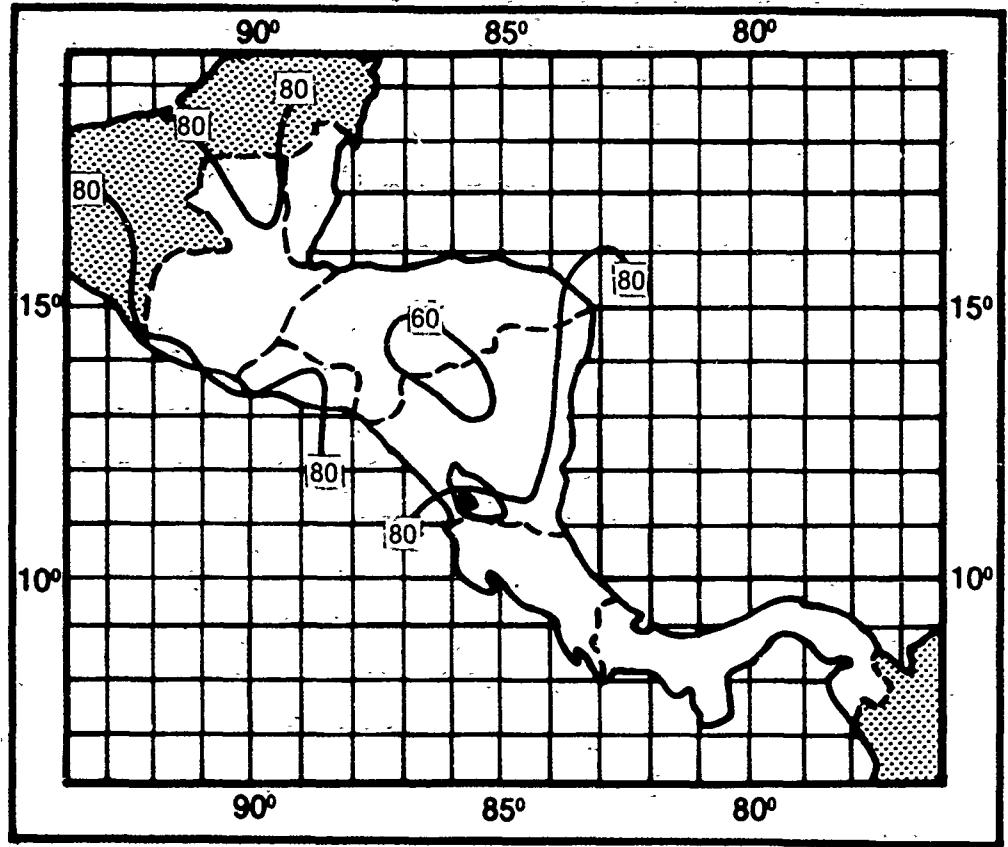


CHART A-28 Mean Relative Humidity, August, 00Z

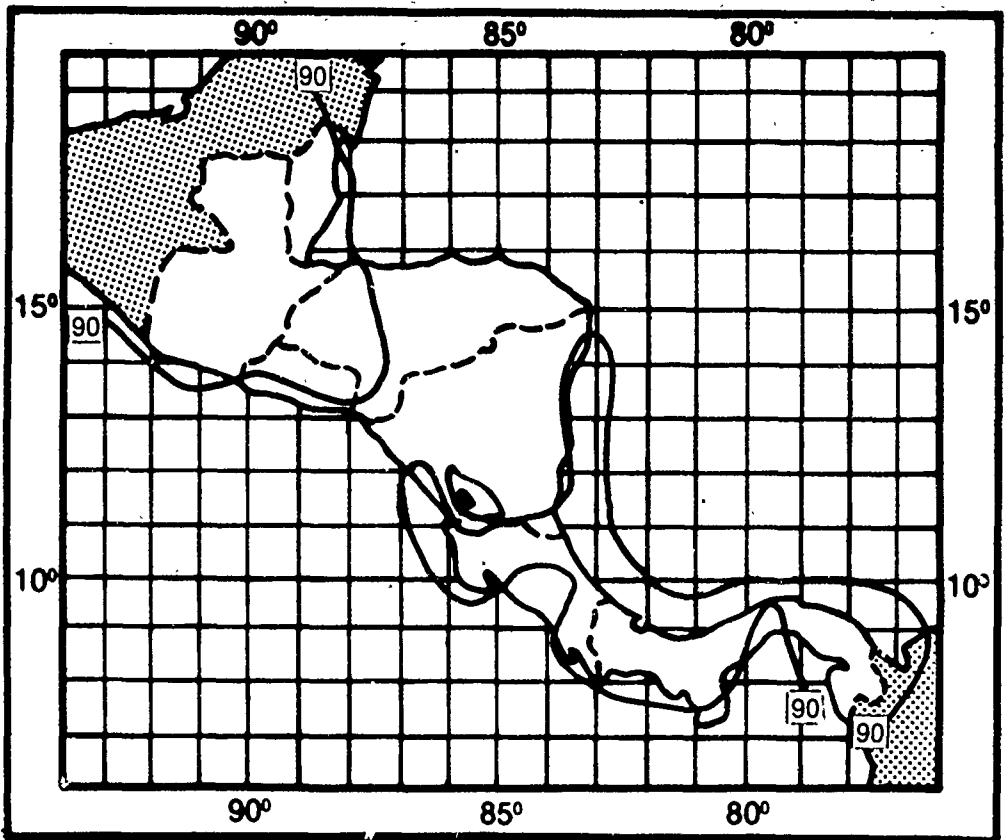


CHART A-29 Mean Relative Humidity, August, 12Z

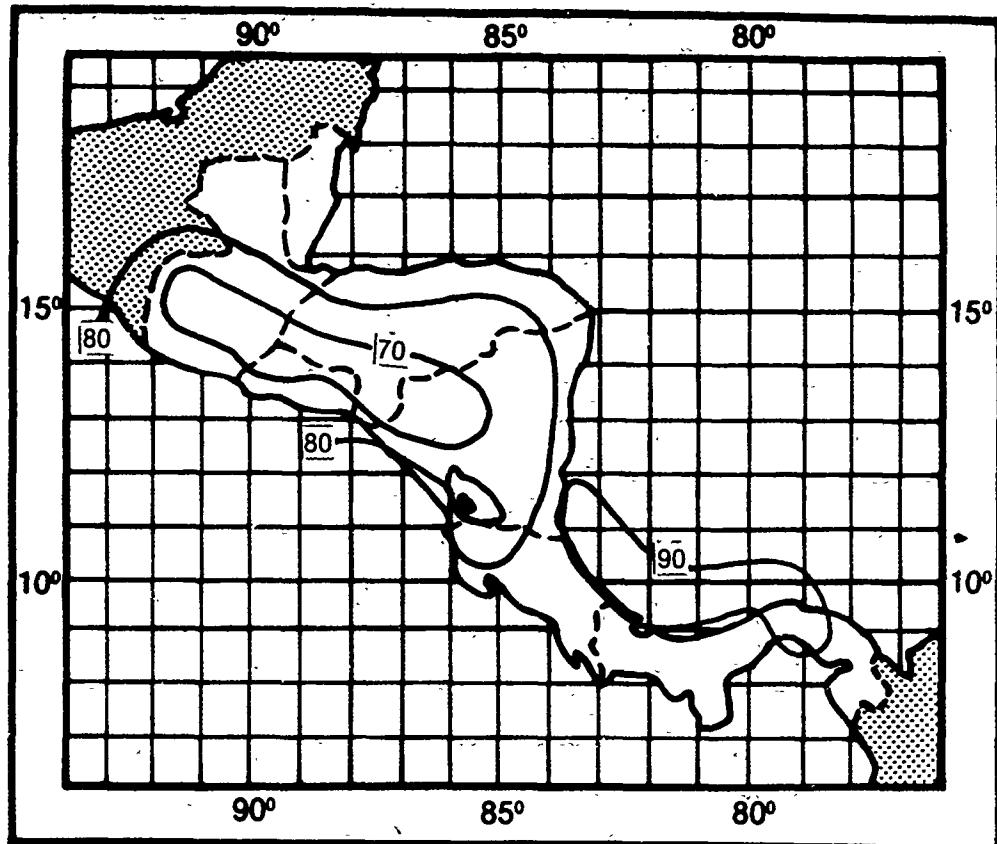


CHART A-30 Mean Relative Humidity, November, 00Z

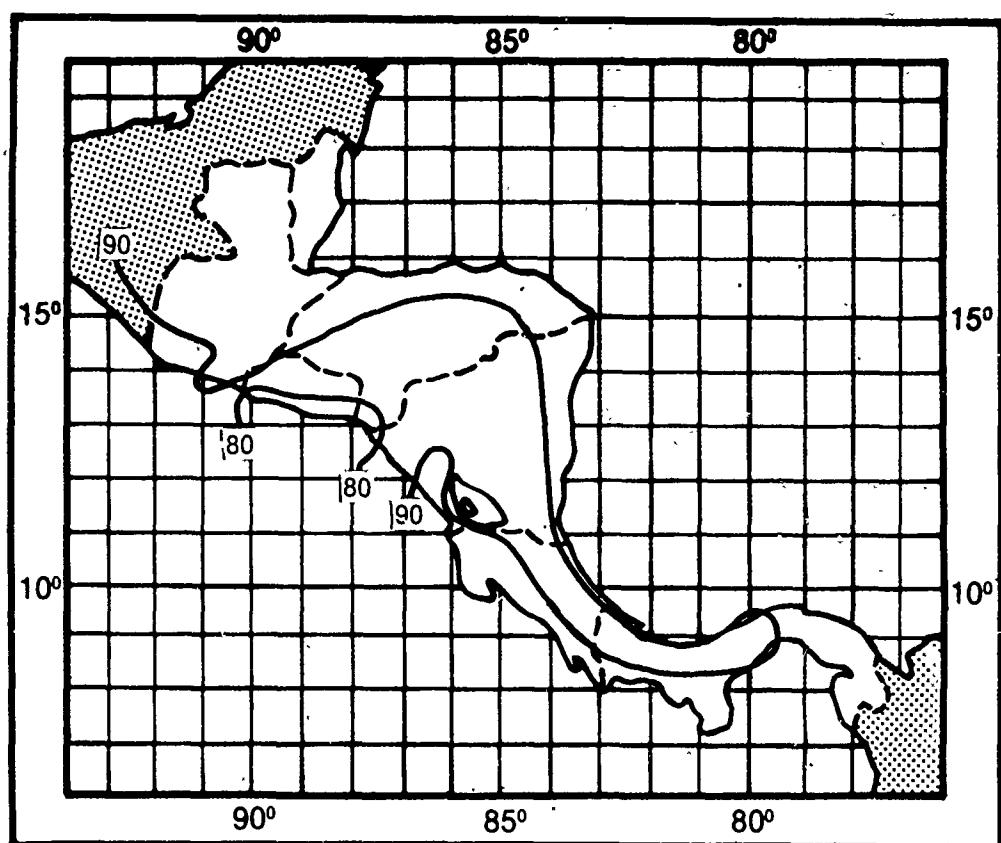
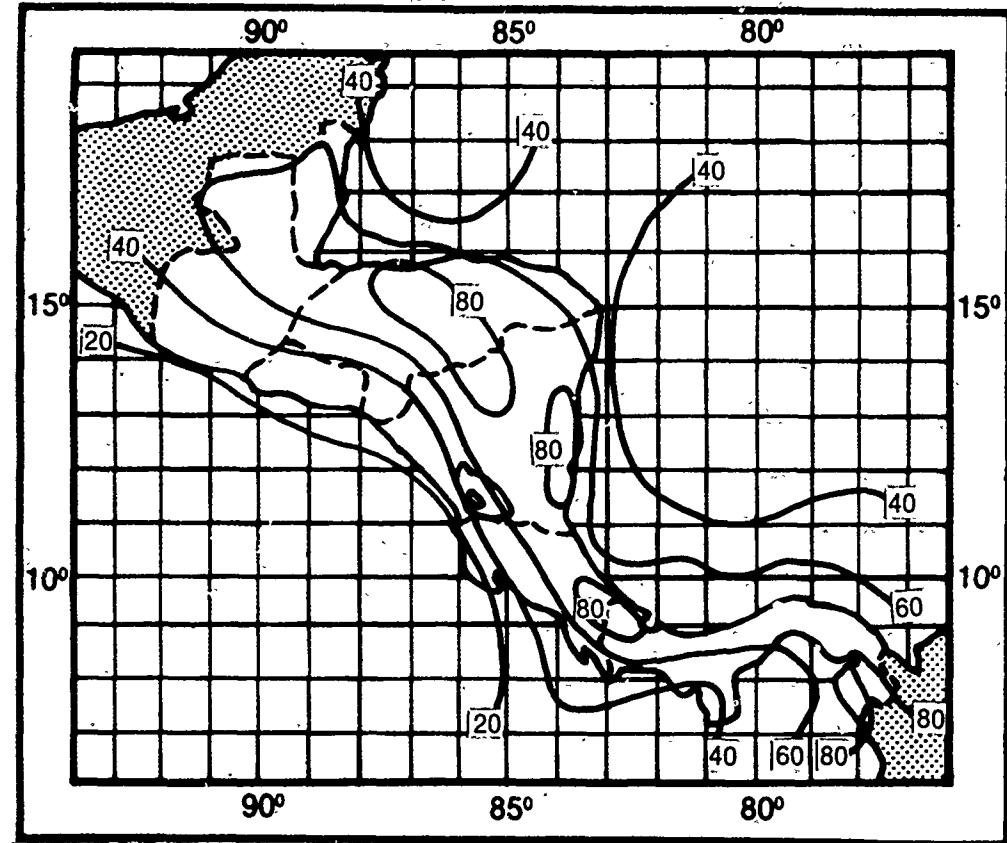
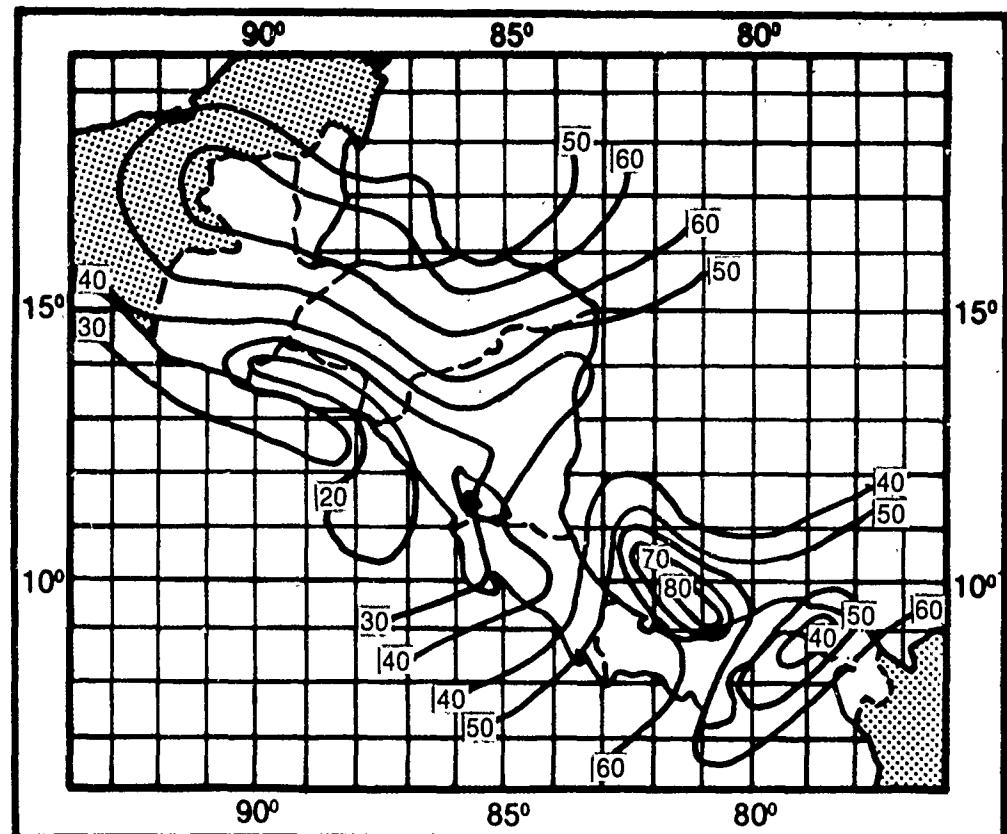


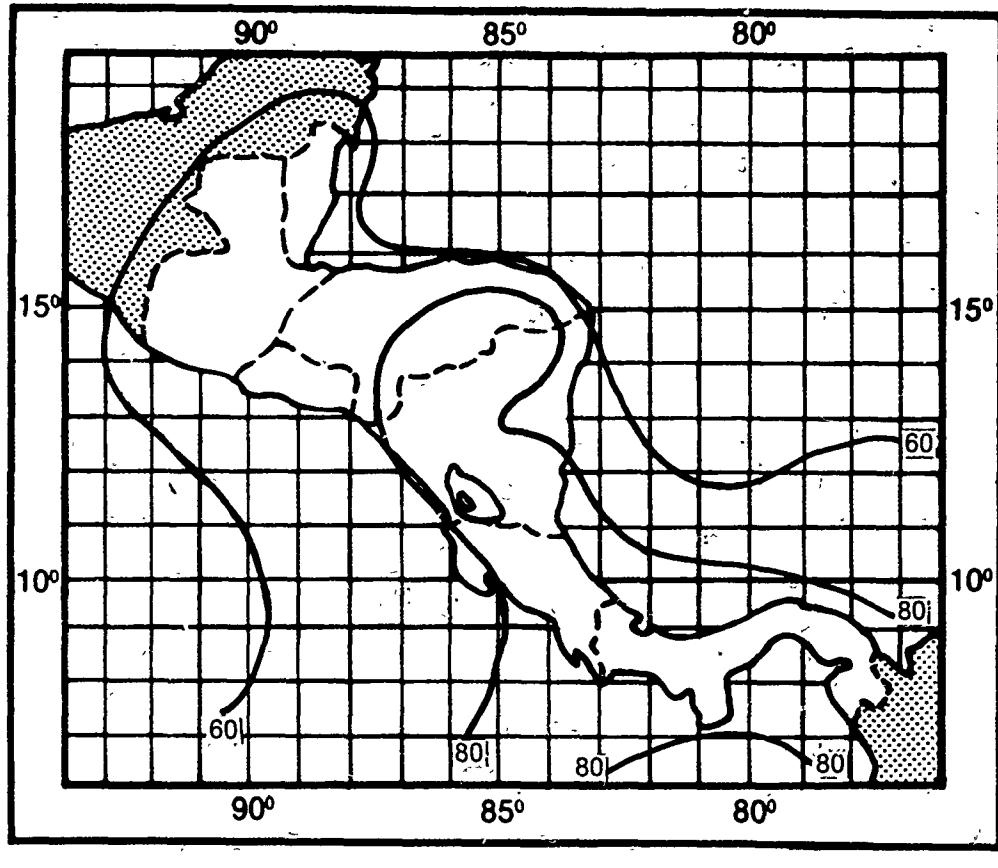
CHART A-31 Mean Relative Humidity, November, 12Z



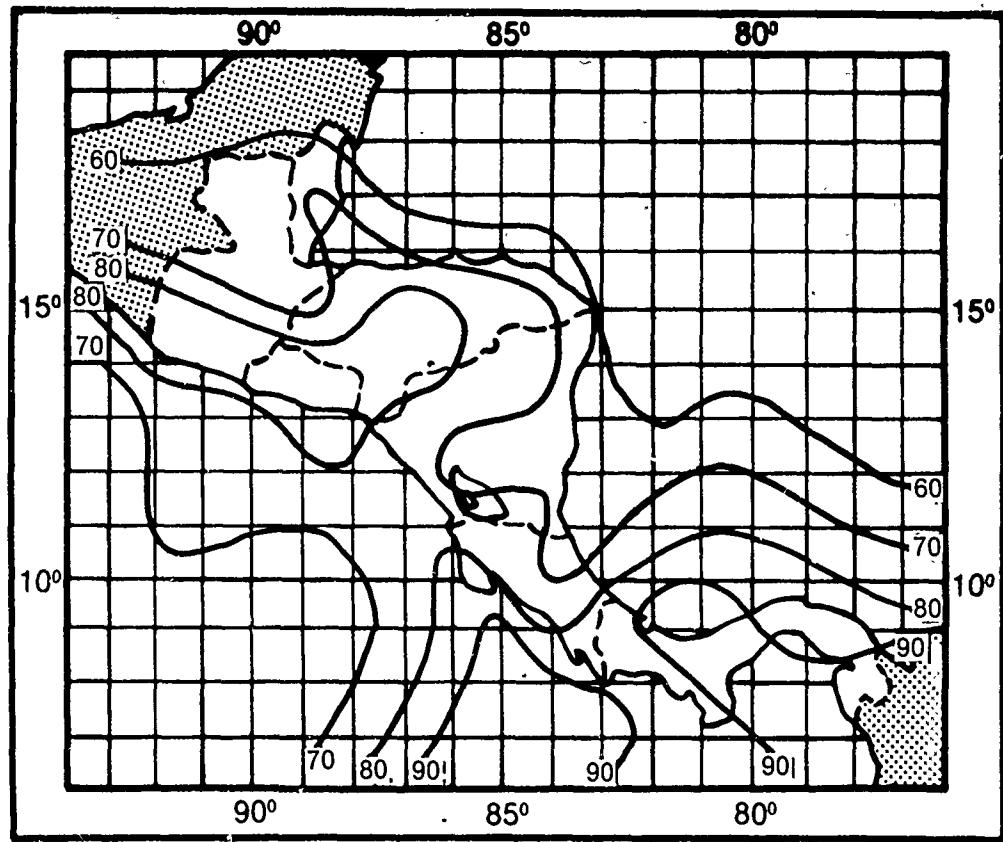
**CHART A-32 Percent of Time Total Sky Cover $> 6/10$,
February, 18Z**



**CHART A-33 Percent of Time Total Sky Cover $> 6/10$,
February, 06Z**



**CHART A-34 Percent of Time Total Sky Cover $> 6/10$,
May, 18Z**



**CHART A-35 Percent of Time Total Sky Cover $> 6/10$,
May, 06Z**

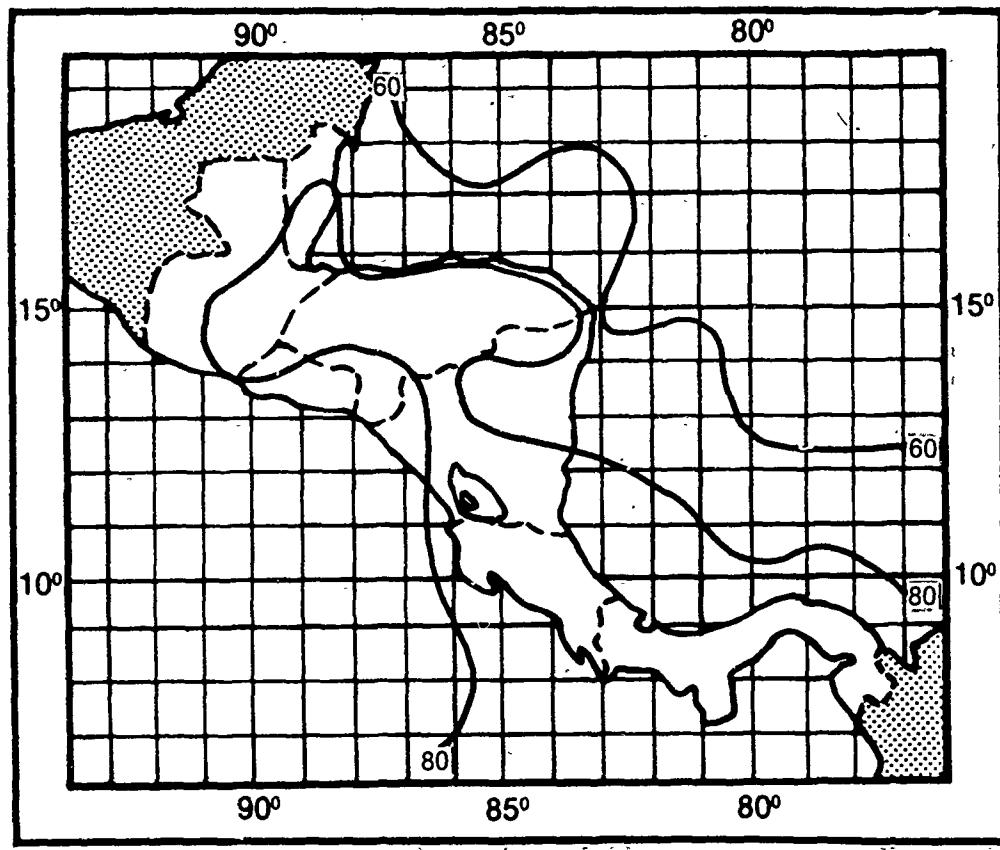


CHART A-36 Percent of Time Total Sky Cover $> 6/10$,
August, 18Z

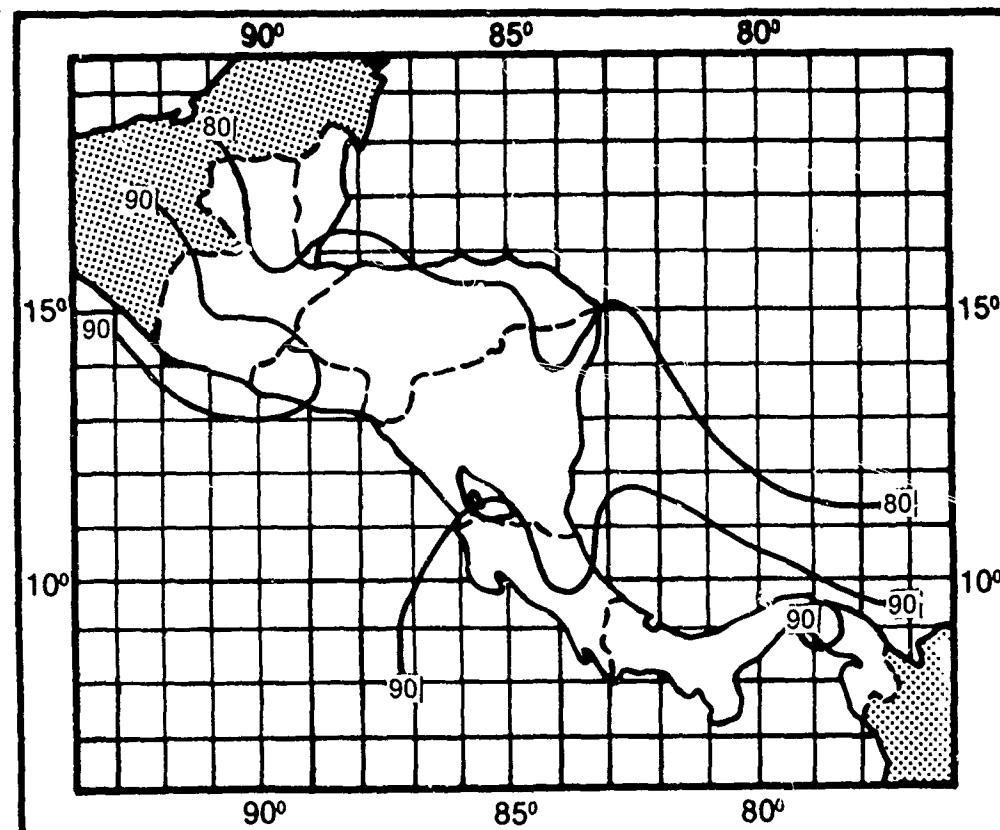


CHART A-37 Percent of Time Total Sky Cover $> 6/10$,
August, 06Z

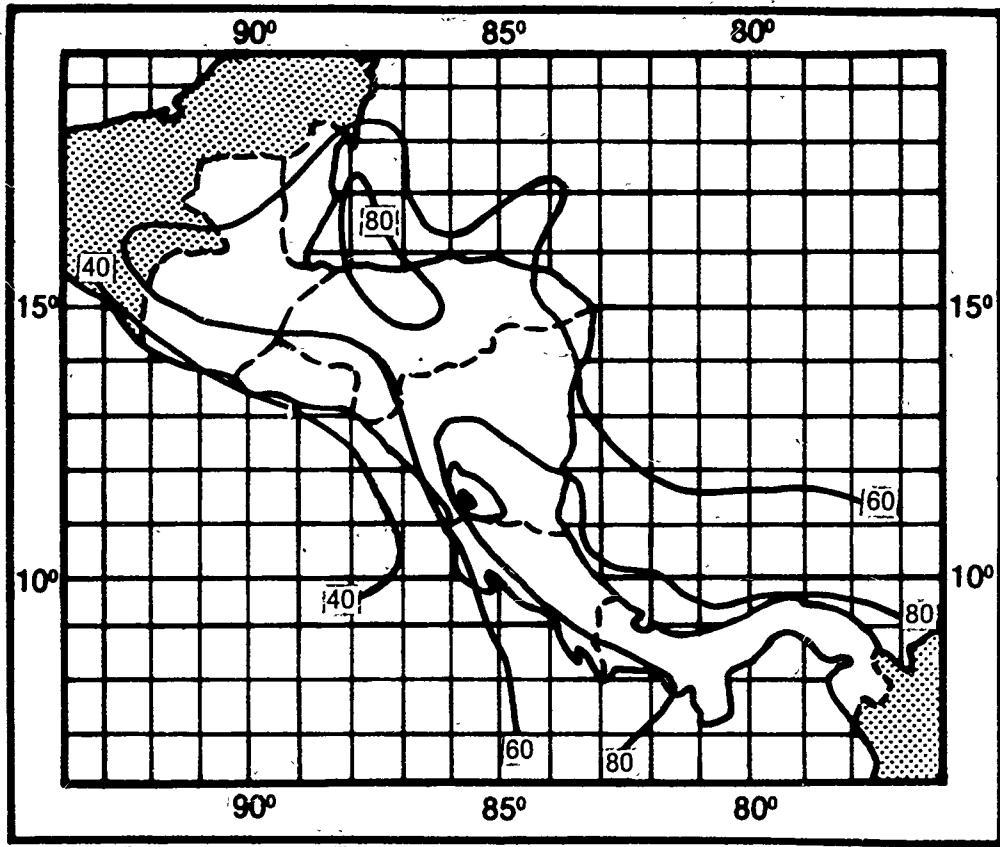


CHART A-38 Percent of Time Total Sky Cover $> 6/10$,
November, 18Z

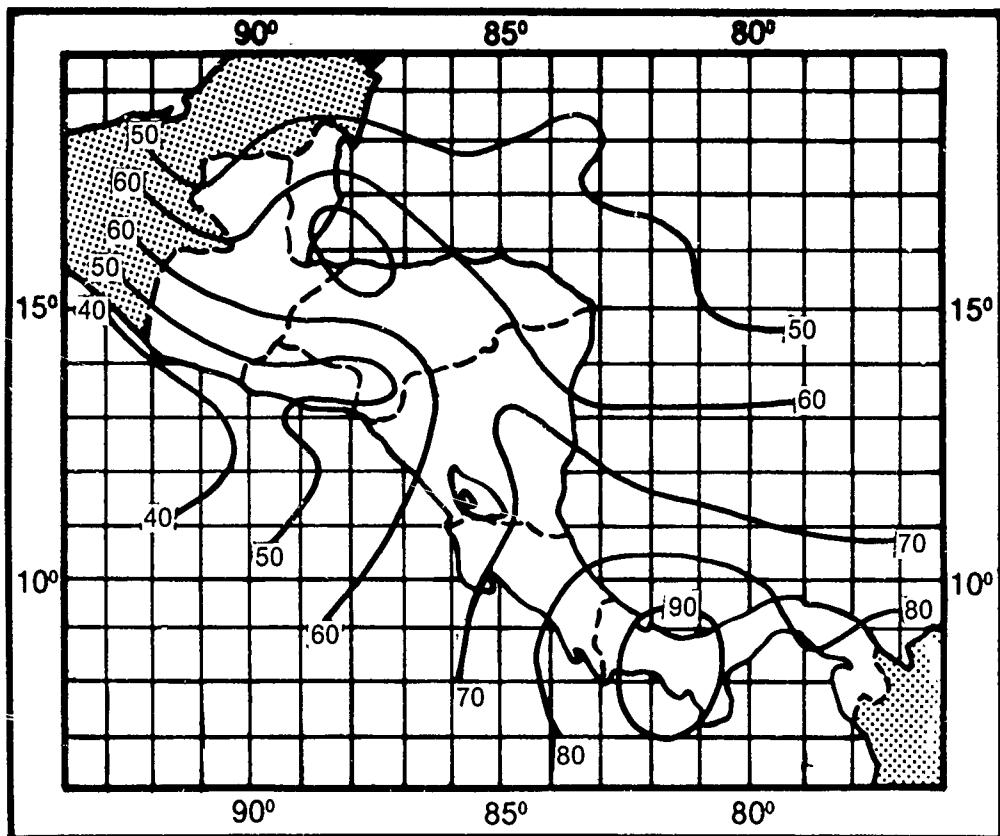


CHART A-39 Percent of Time Total Sky Cover $> 6/10$,
November, 06Z

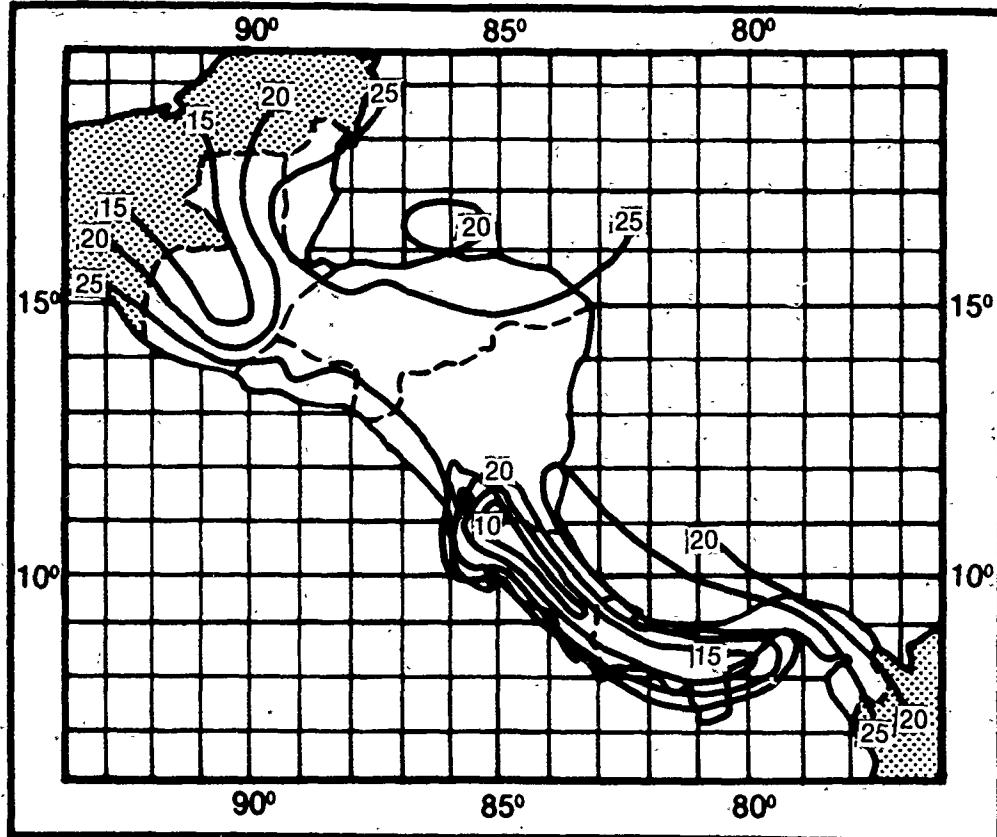


CHART A-40 Number of Days Favorable for Personnel Paratroop Operations, February, 00Z (Ceiling > 1,500 ft, Visibility > 3 miles, Winds 13 kts)

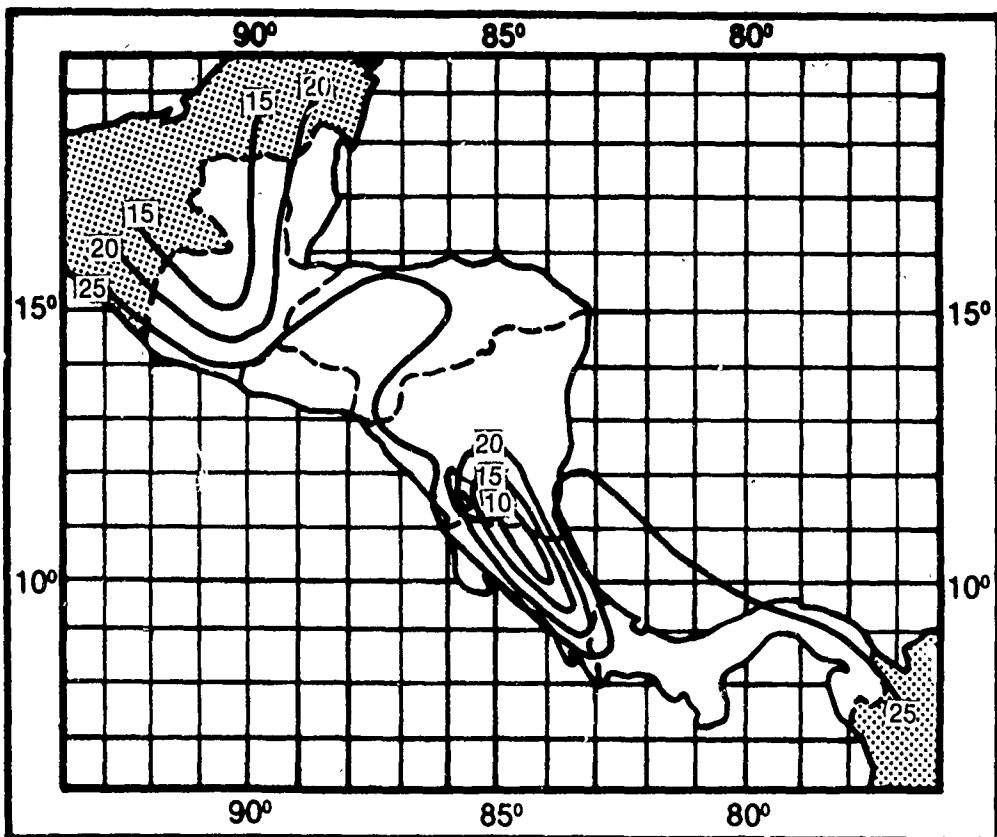


CHART A-41 Number of Days Favorable for Personnel Paratroop Operations, February, 12Z (Ceiling > 1,500 ft, Visibility > 3 miles, Winds < 13 kts)

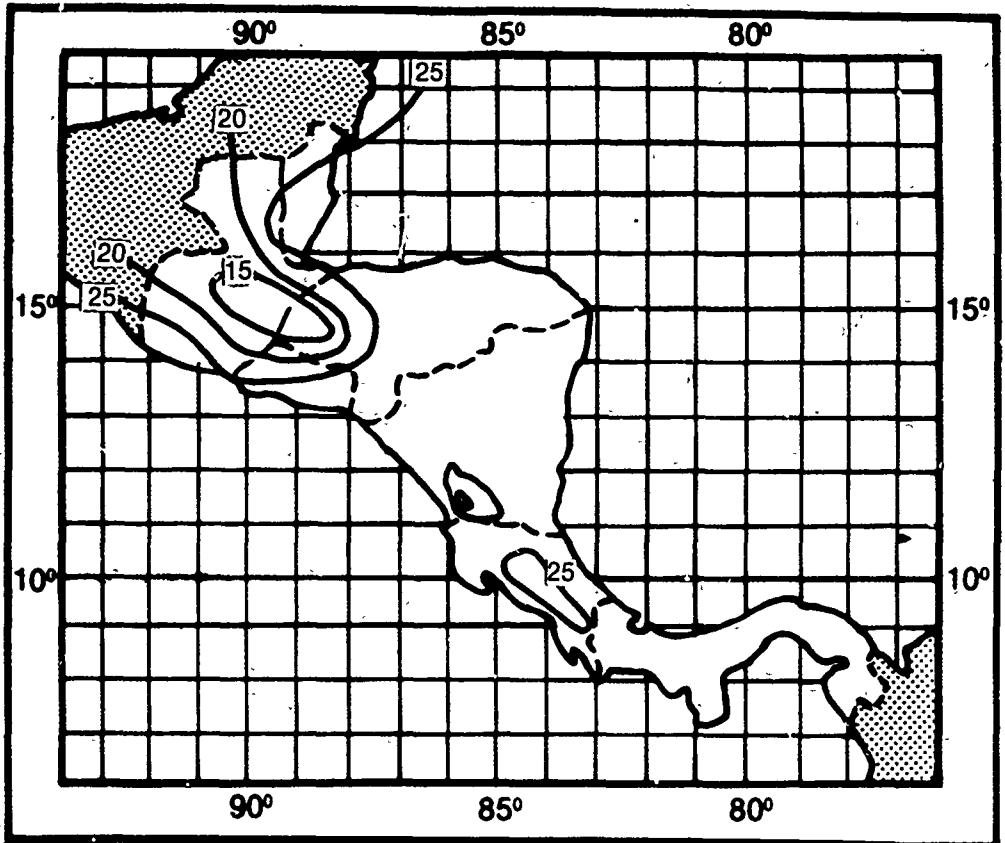


CHART A-42 Number of Days Favorable for Personnel Paratroop Operations, May, 00Z (Ceiling > 1,500 ft, Visibility > 3 miles, Winds < 13 kts)

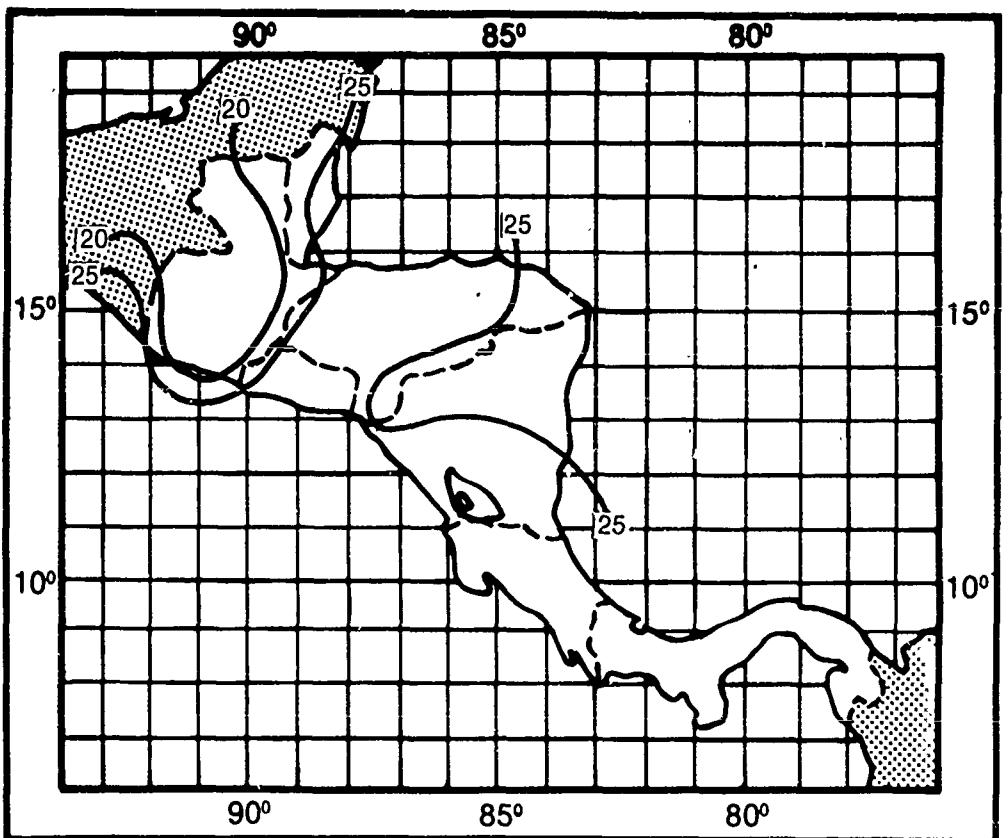


CHART A-43 Number of Days Favorable for Personnel Paratroop Operations, May, 12Z (Ceiling > 1,500 ft, Visibility > 3 miles, Winds < 13 kts)

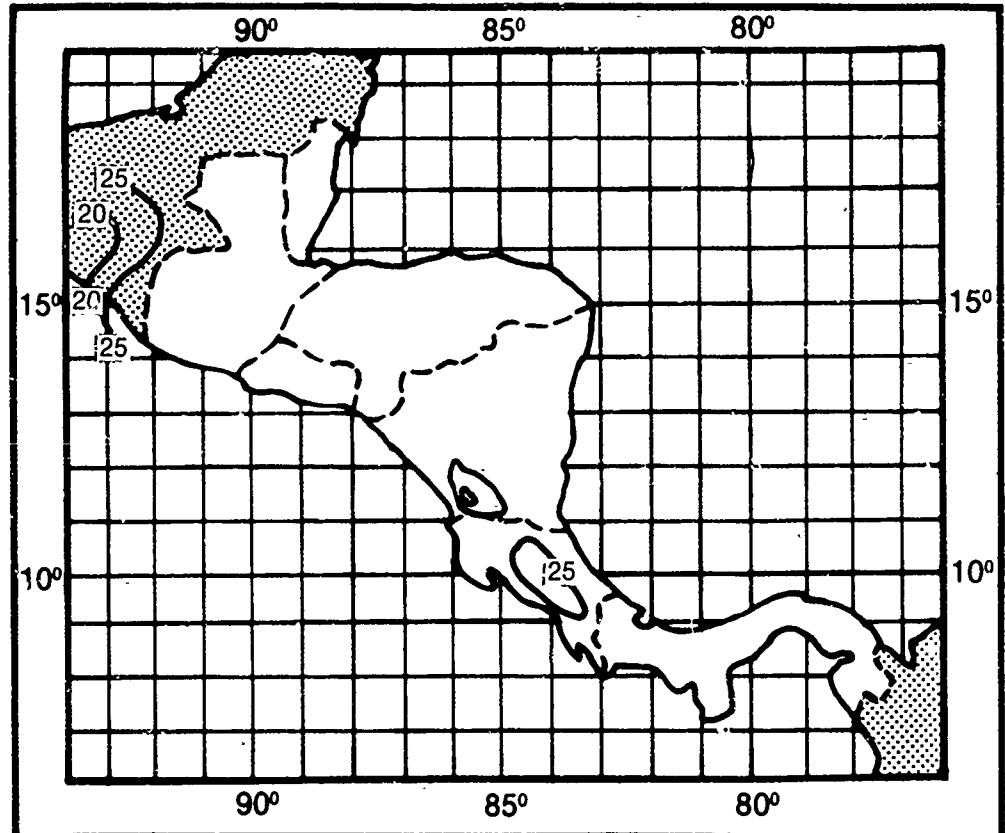


CHART A-44 Number of Days Favorable for Personnel Paradrop Operations, August, 00Z (Ceiling $> 1,500$ ft, Visibility > 3 miles, Winds ≤ 13 kts)

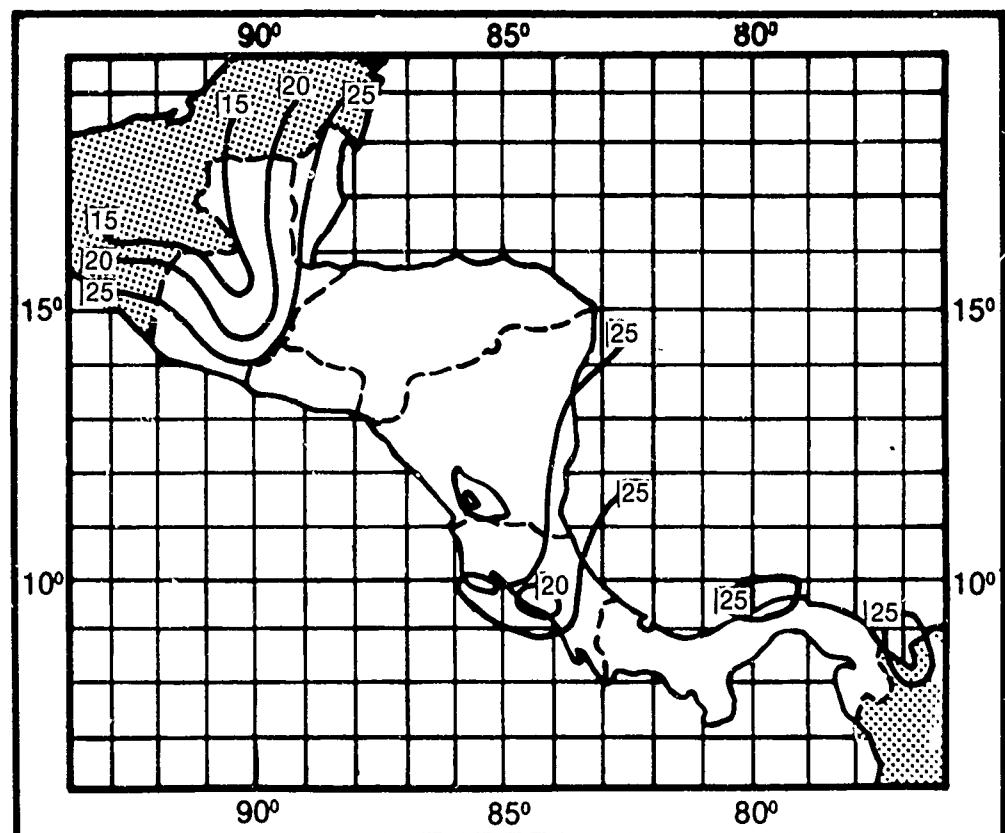


CHART A-45 Number of Days Favorable for Personnel Paradrop Operations, August, 12Z (Ceiling $> 1,500$ ft, Visibility > 3 miles, Winds ≤ 13 kts)

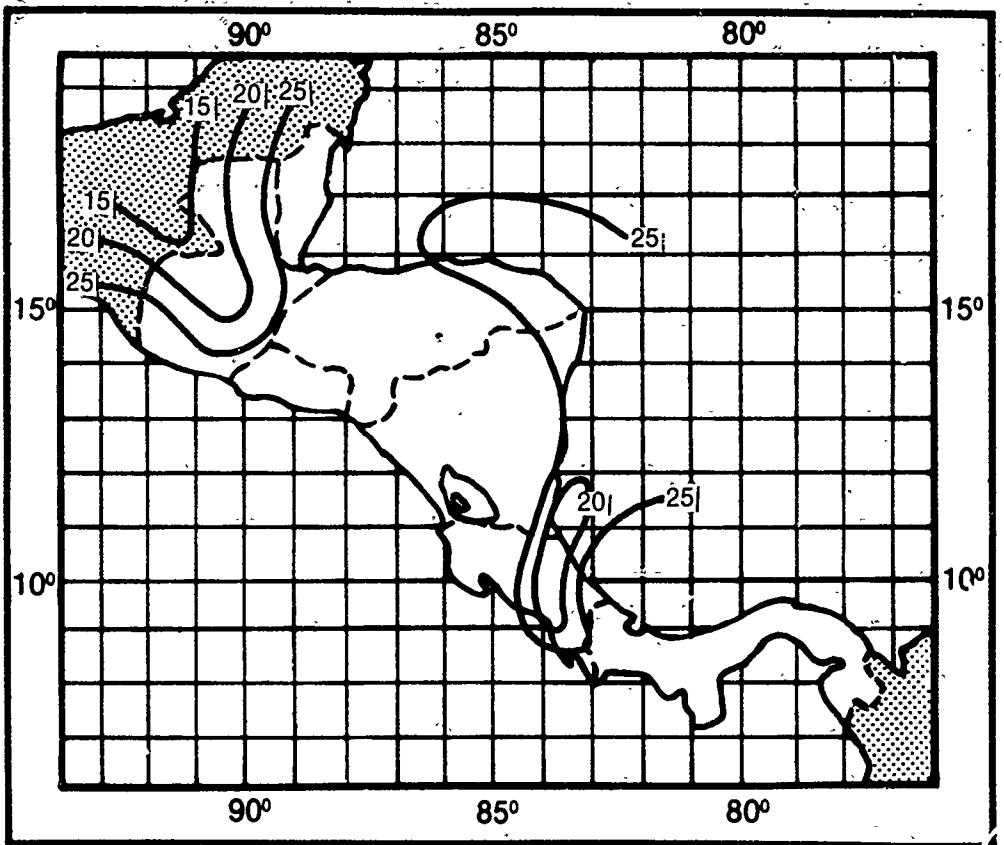


CHART A-46 Number of Days Favorable for Personnel Parachute Operations, November, 00Z (Ceiling > 1,500 ft, Visibility $>$ 3 miles, Winds \leq 13 kts)

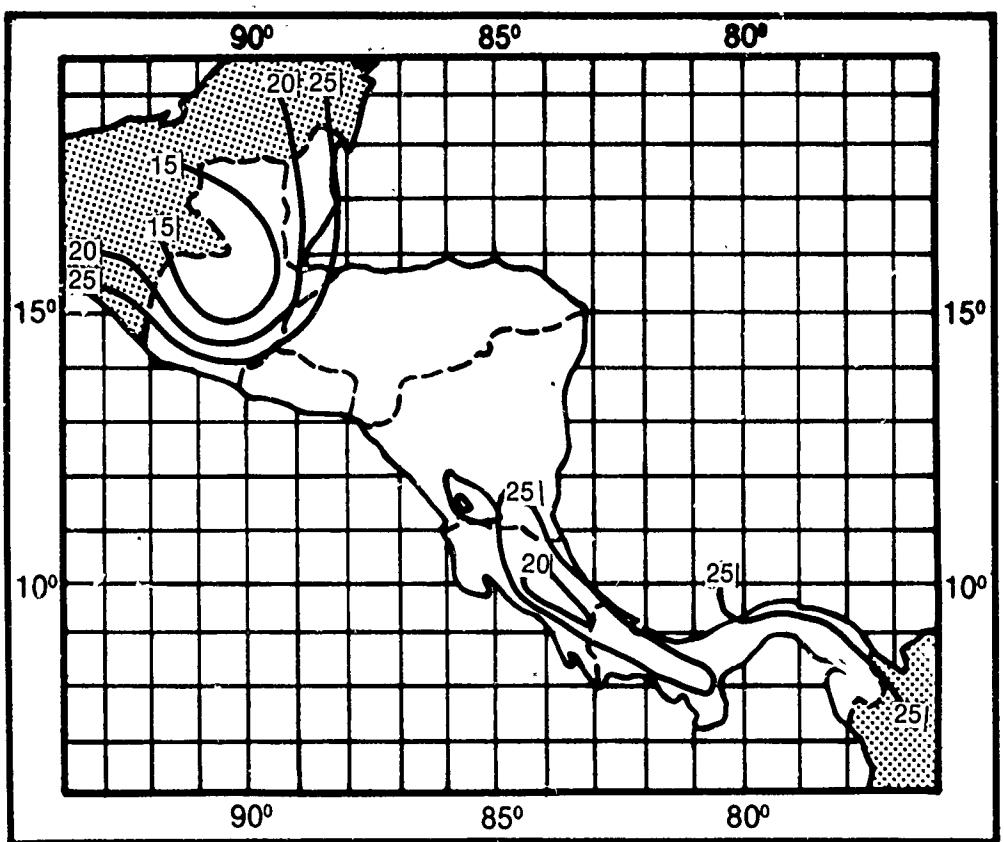
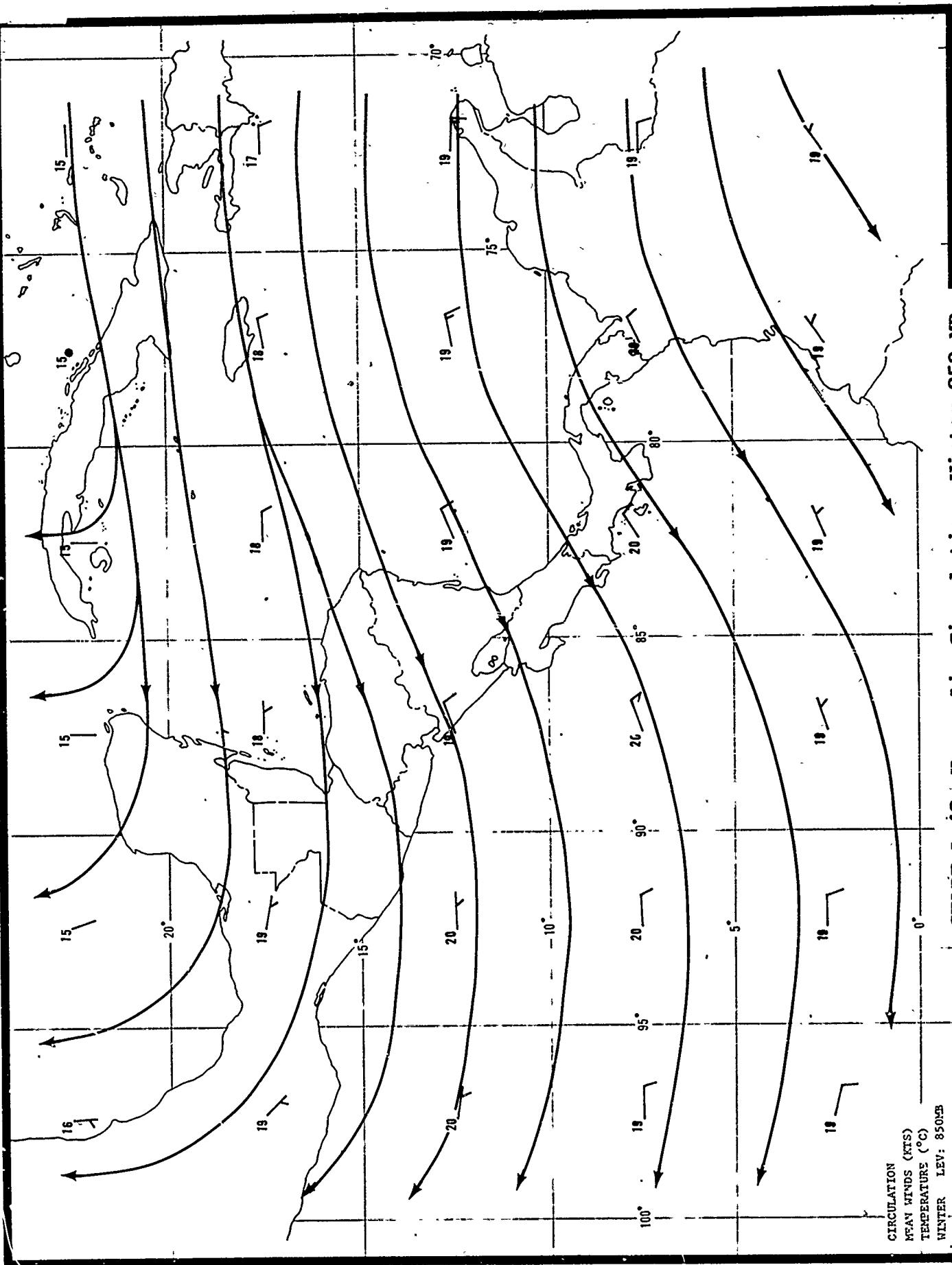


CHART A-47 Number of Days Favorable for Personnel Parachute Operations, November, 12Z (Ceiling > 1,500 ft, Visibility $>$ 3 miles, Winds \leq 13 kts)



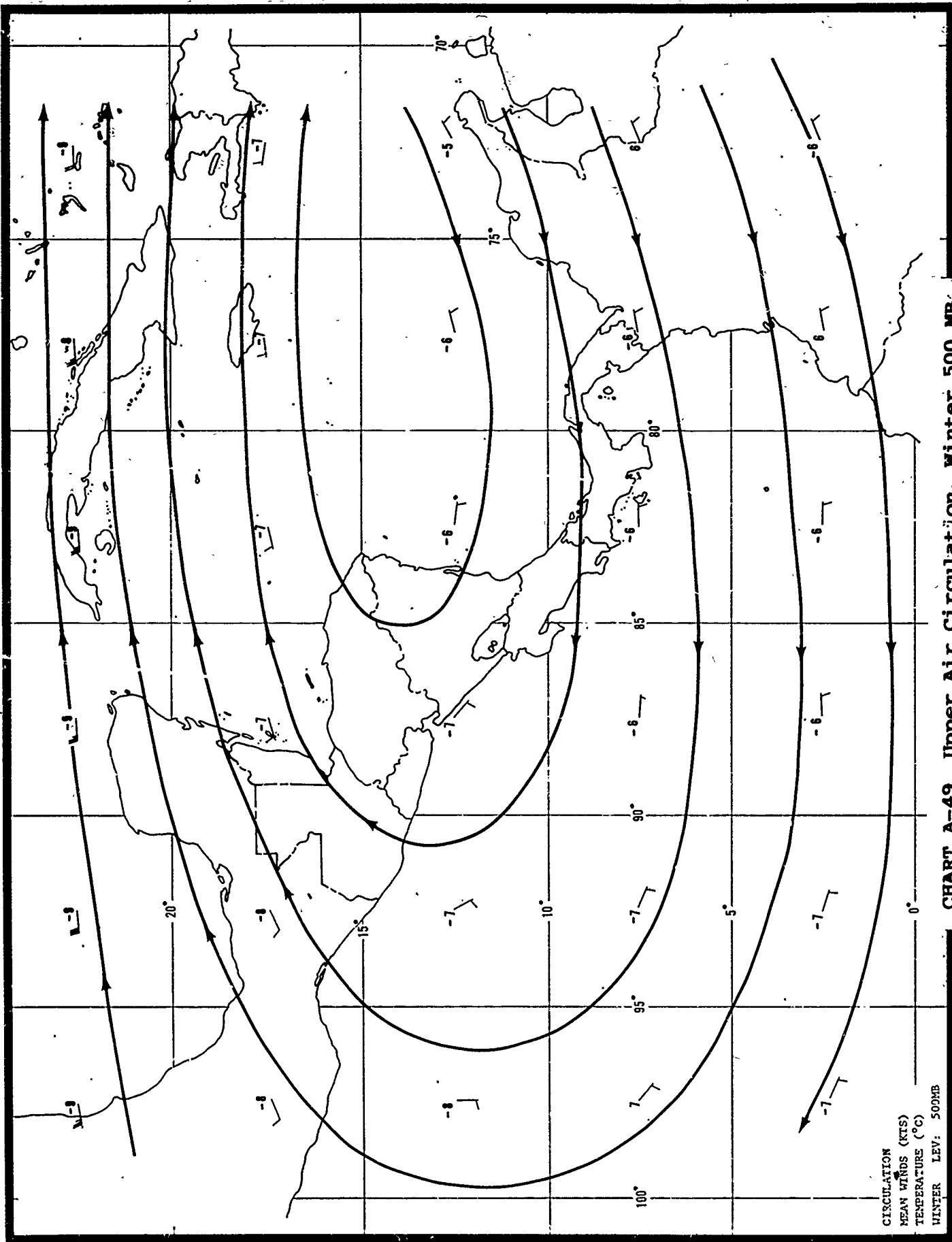


CHART A-49 Upper Air Circulation, Winter 500 MB

CIRCULATION	MEAN WINDS (KTS)	TEMPERATURE (°C)	WINTER LEV: 500
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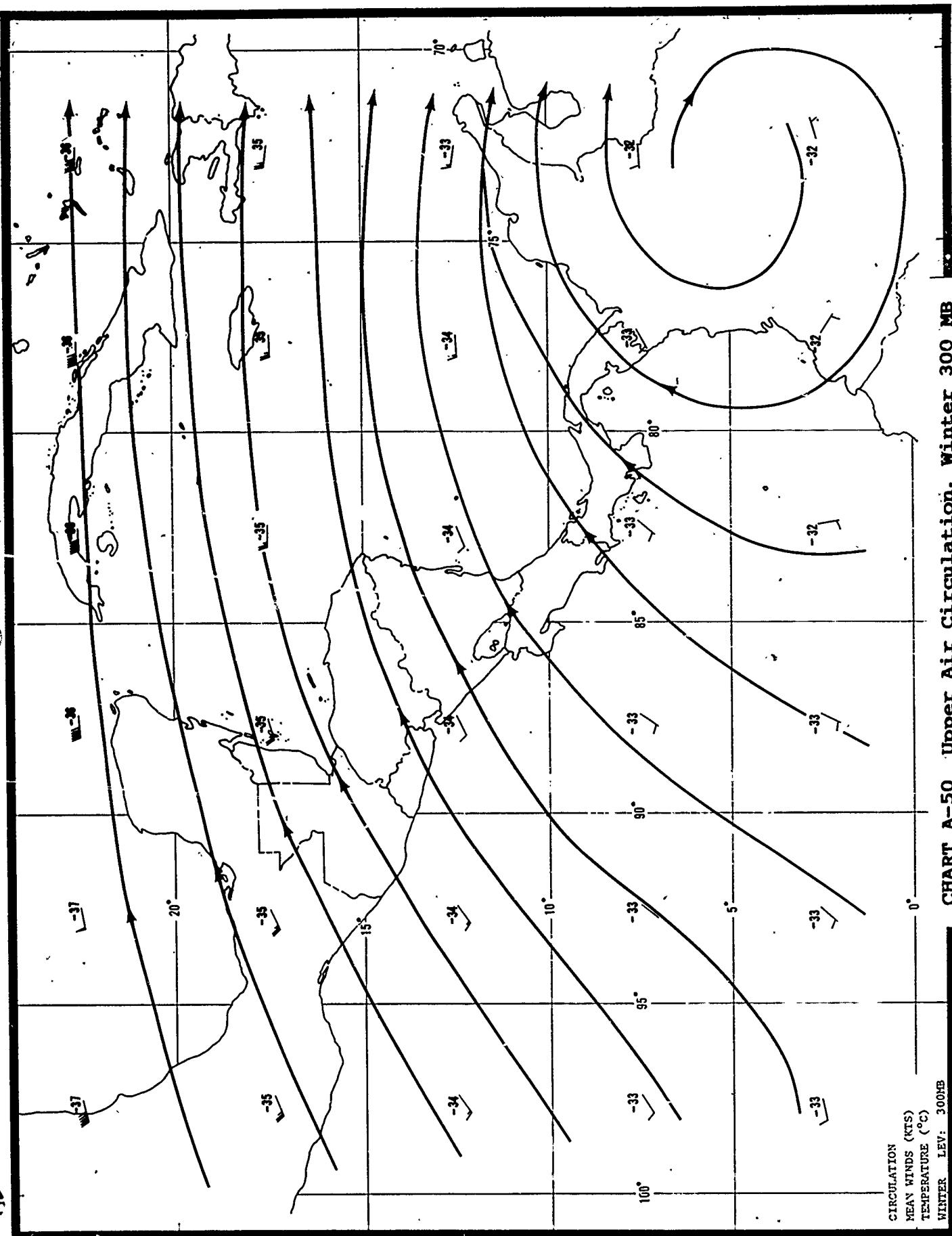


CHART A-50 Upper Air Circulation, Winter 300 MB

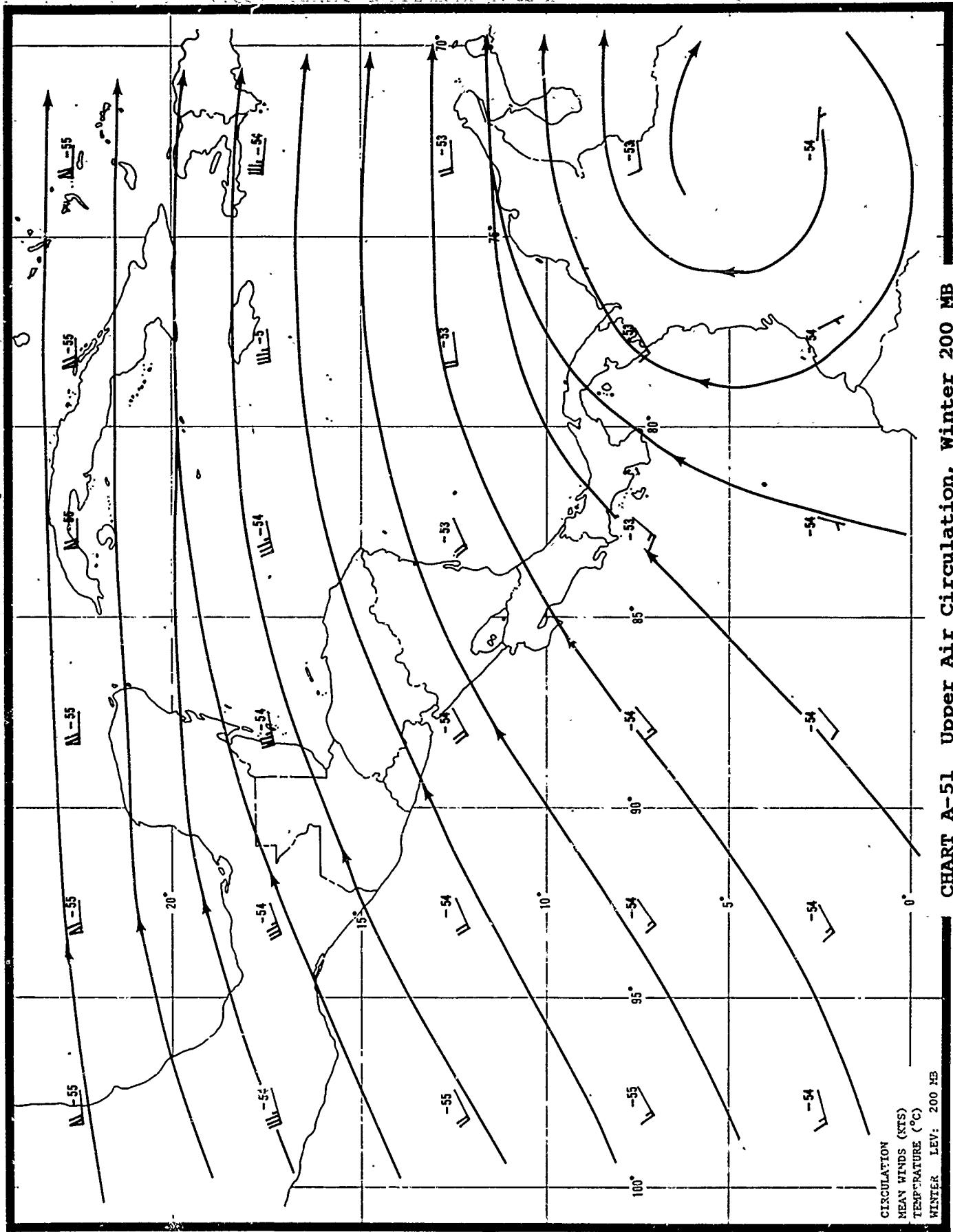


CHART A-51 Upper Air Circulation, Winter 200 MB

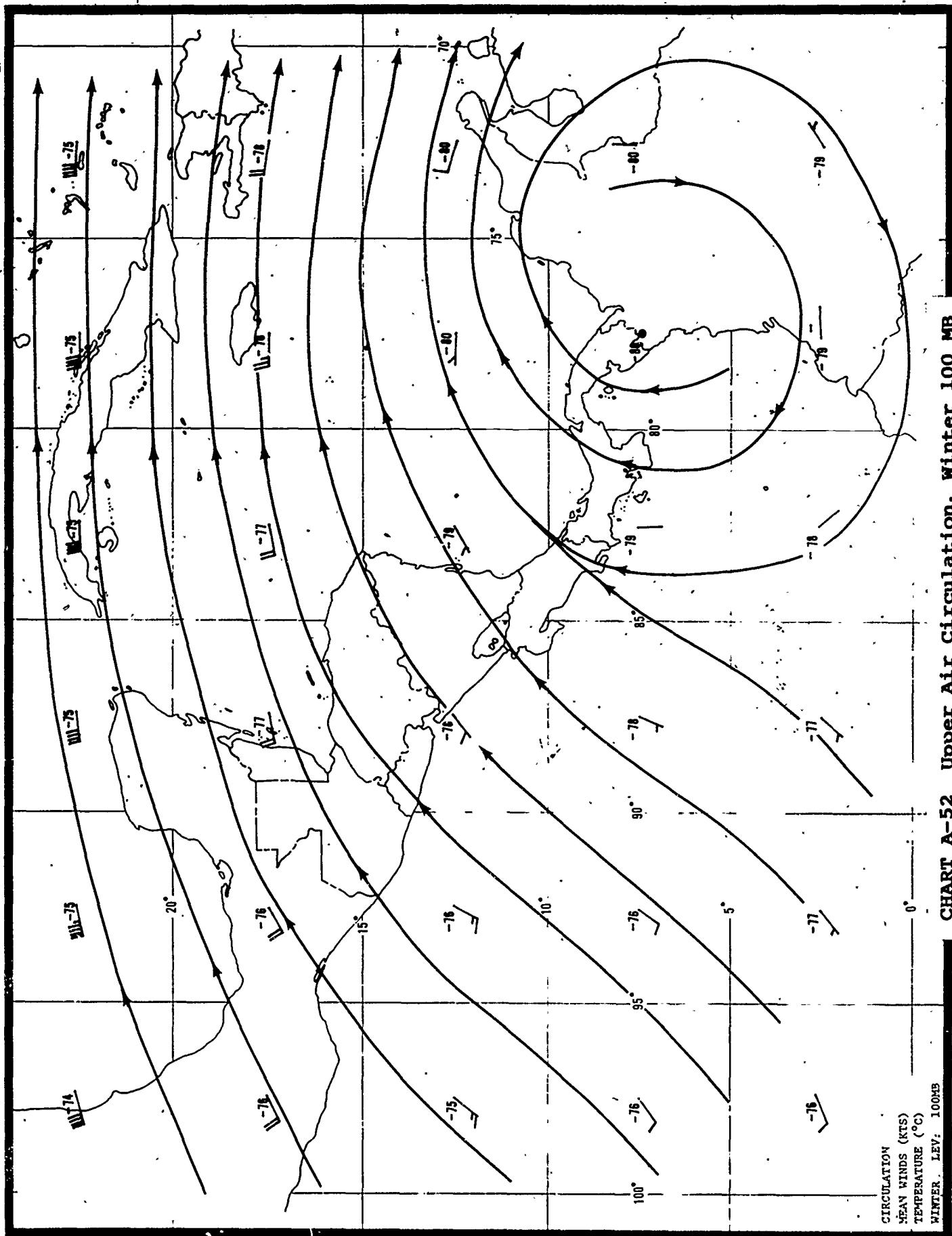
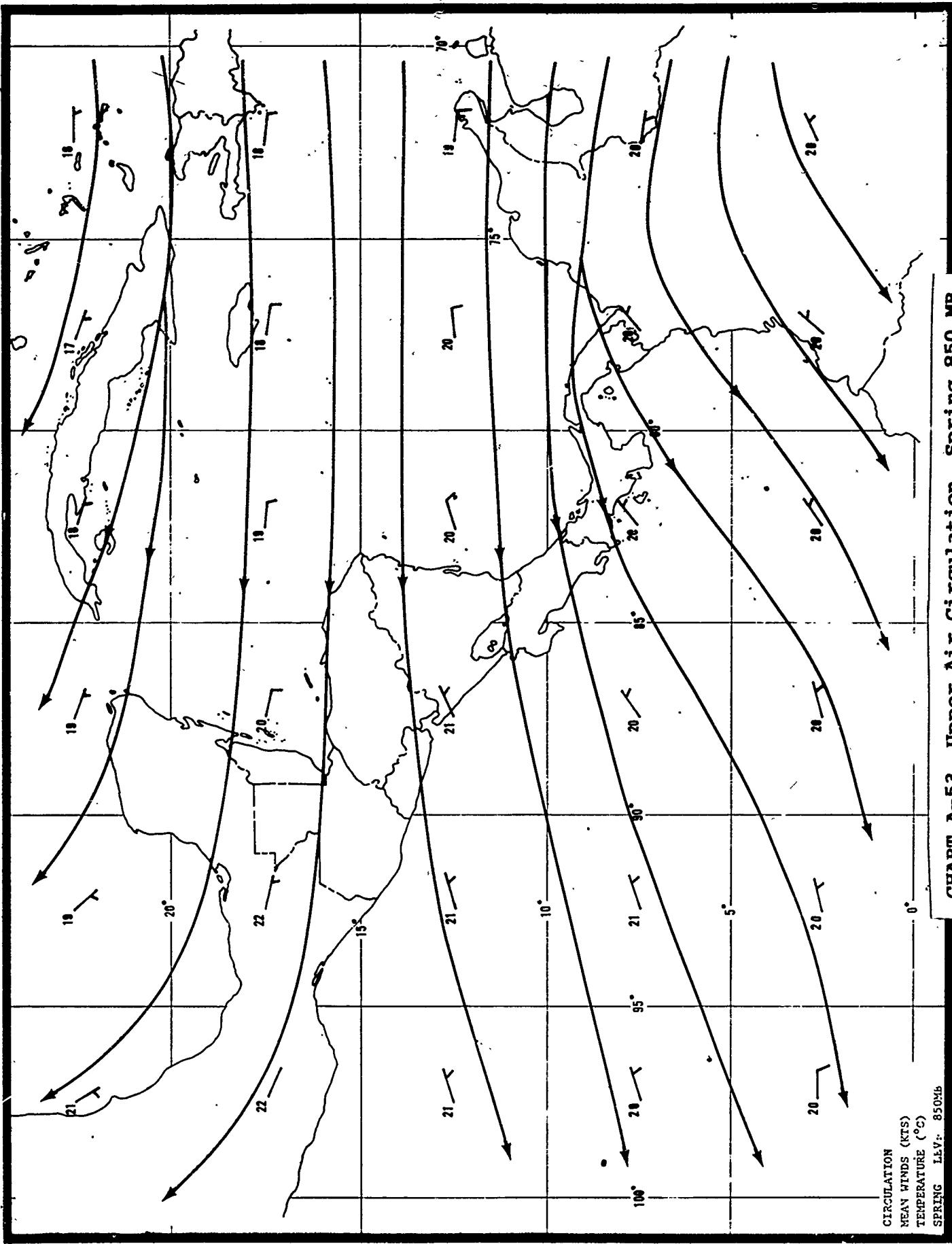


CHART A-52 Upper Air circulation, Winter 100 MB



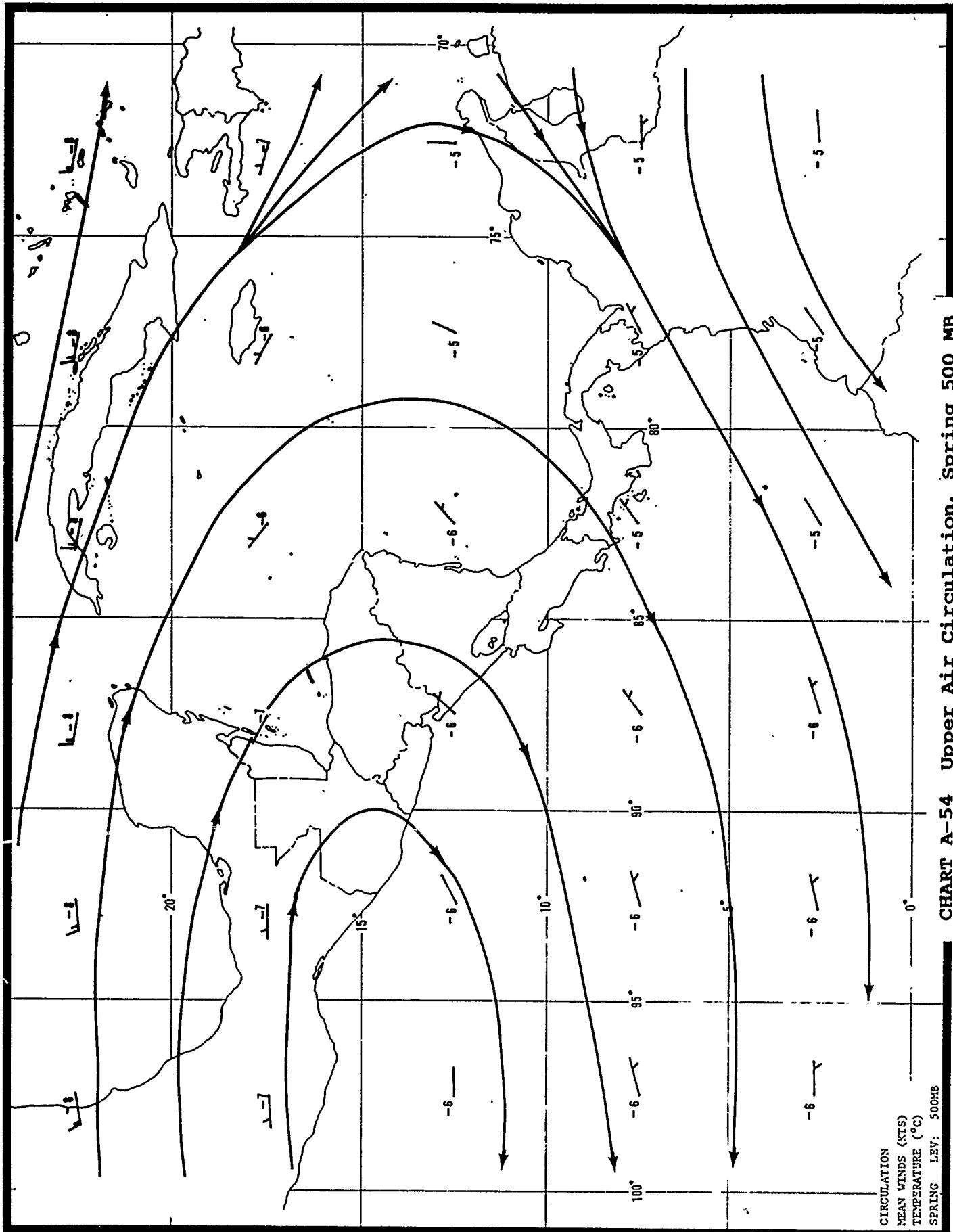
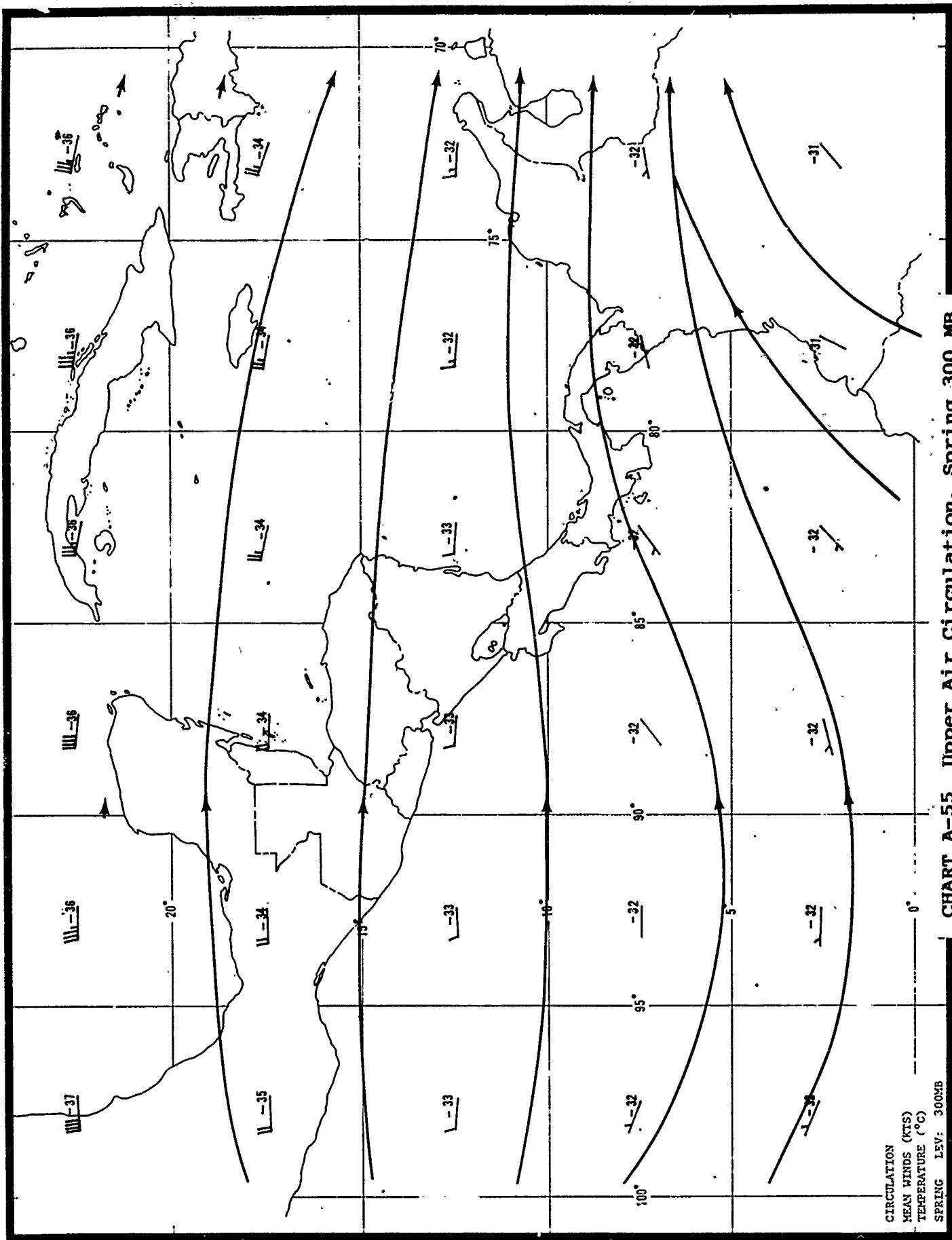


CHART A-54 Upper Air Circulation, Spring 500 MB

CHART A-55 Upper Air Circulation, Spring 300 MB

CIRCULATION
MEAN WINDS (KTS)
TEMPERATURE ($^{\circ}$ C)
SPRING LEVEL: 300MB



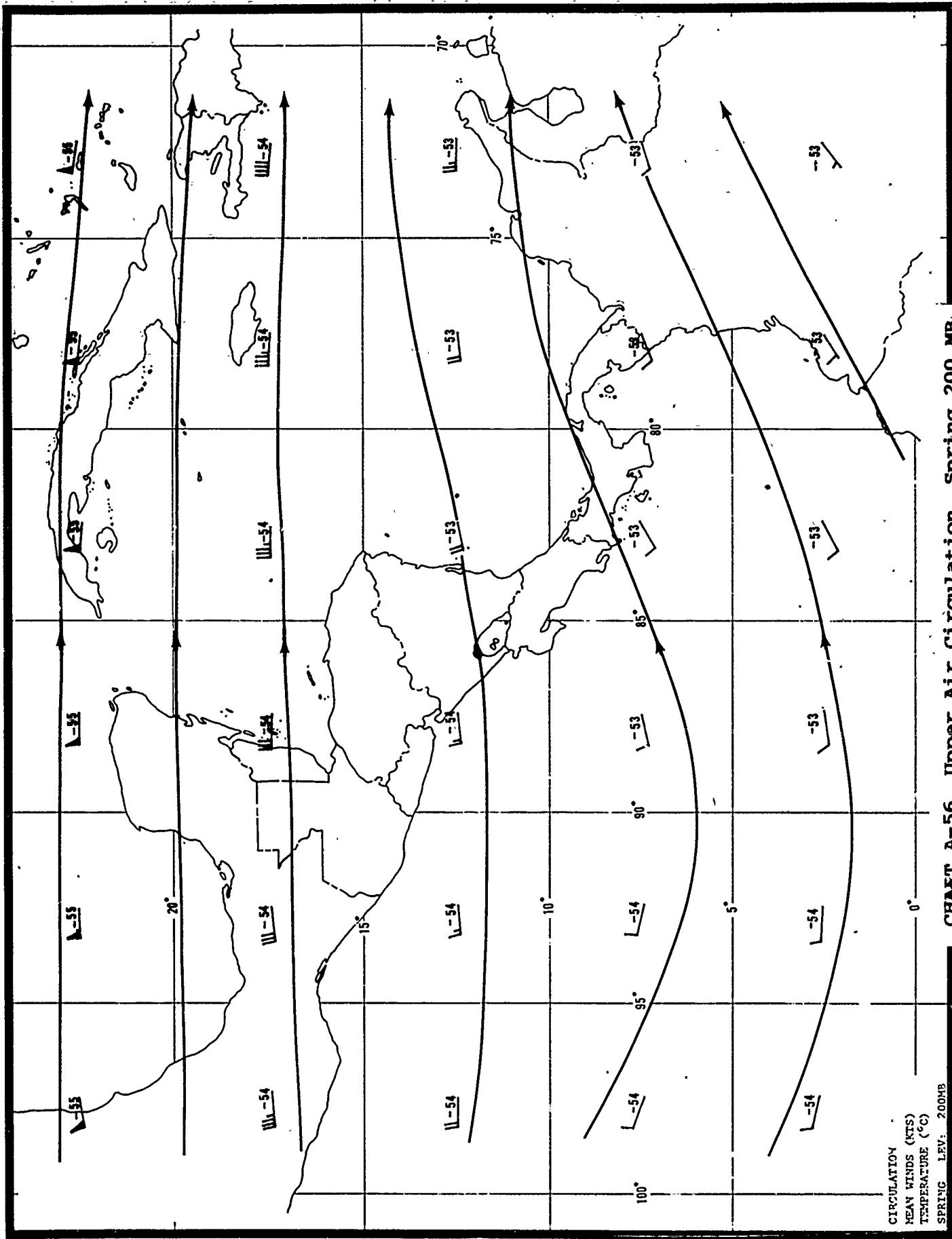
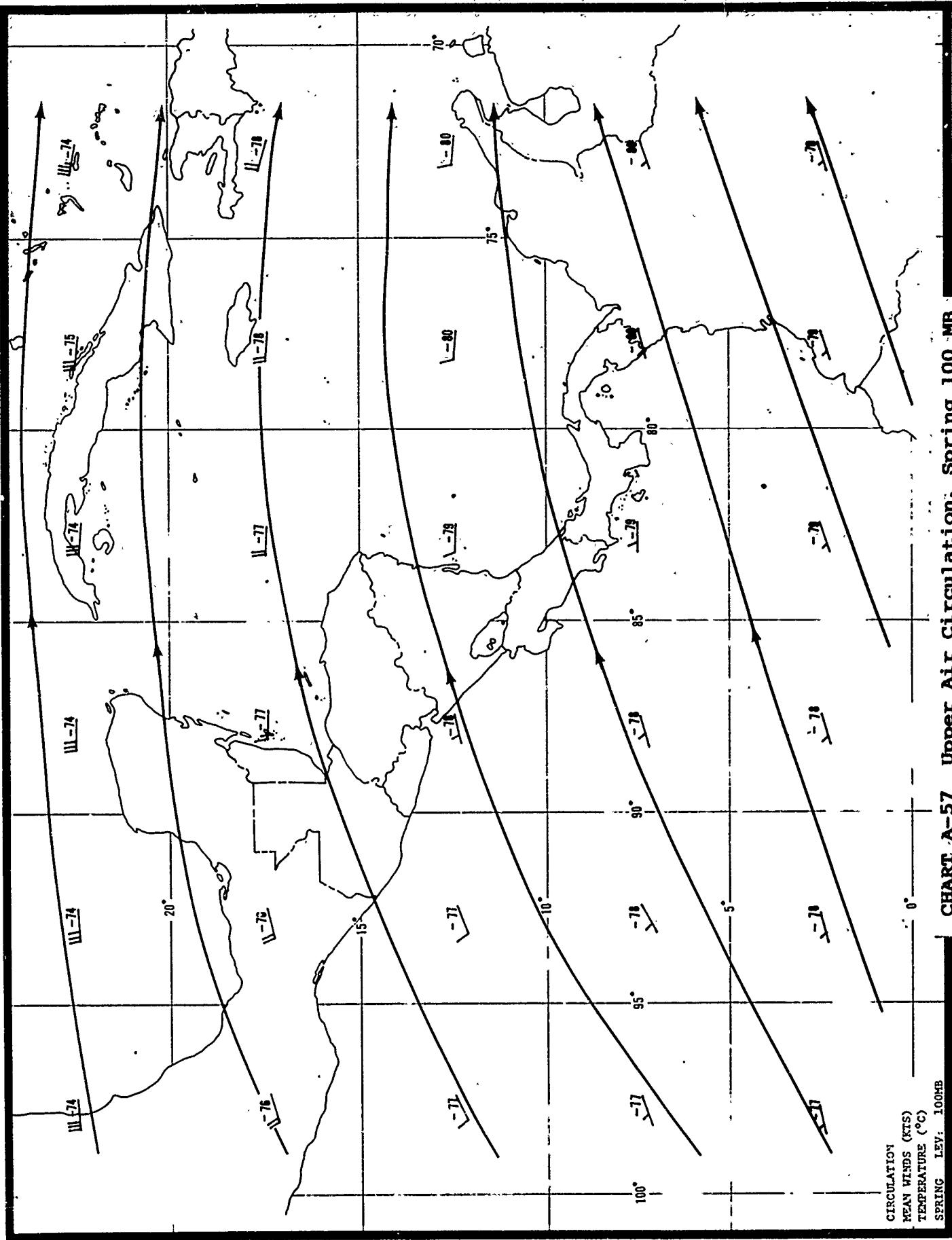
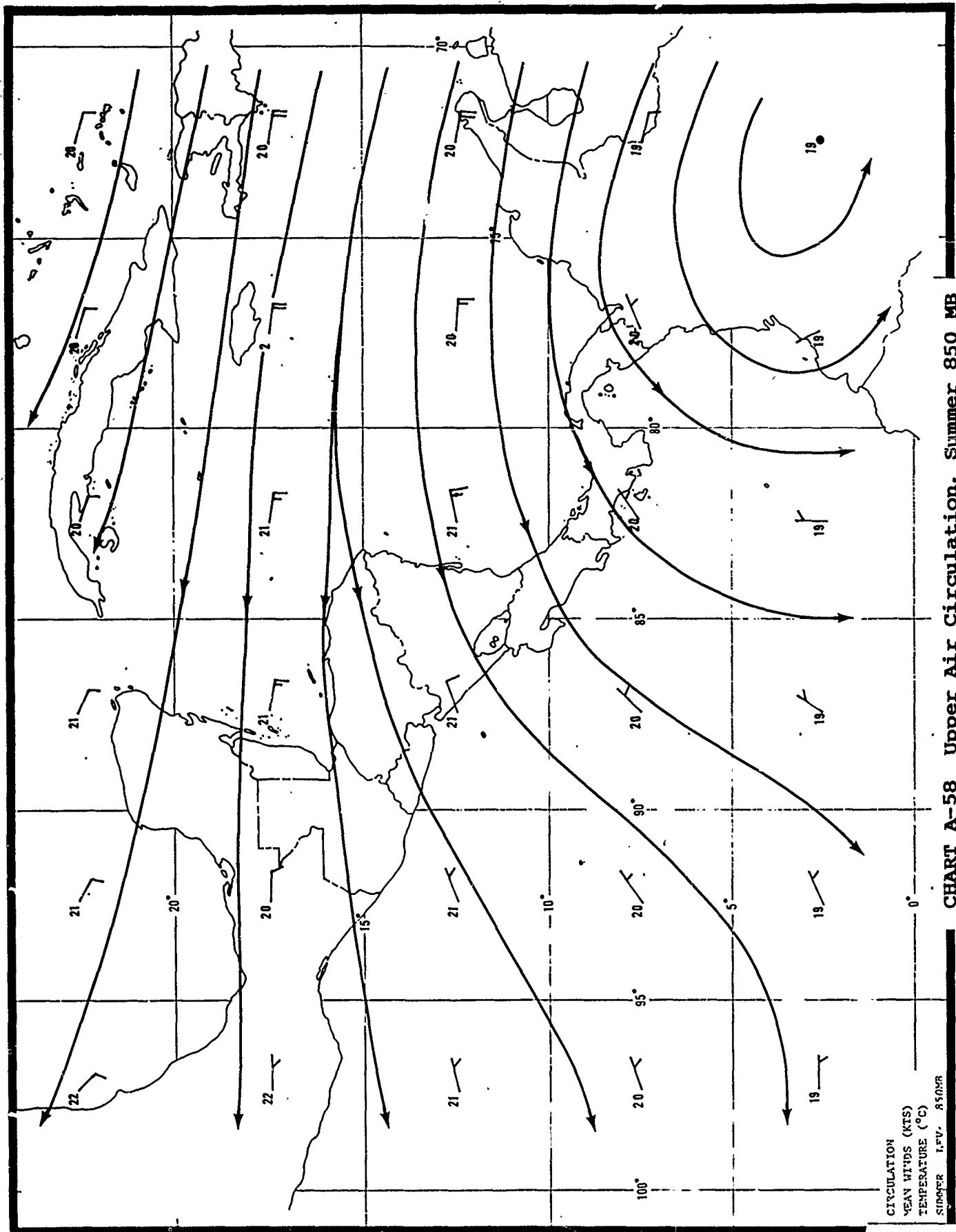


CHART A-56 Upper Air Circulation, spring 200 MB

CHART A-57 Upper Air circulation; Spring 100 MB

CIRCULATION
MEAN WINDS (KTS)
TEMPERATURE (°C)
SPRING LEVEL: 100MB





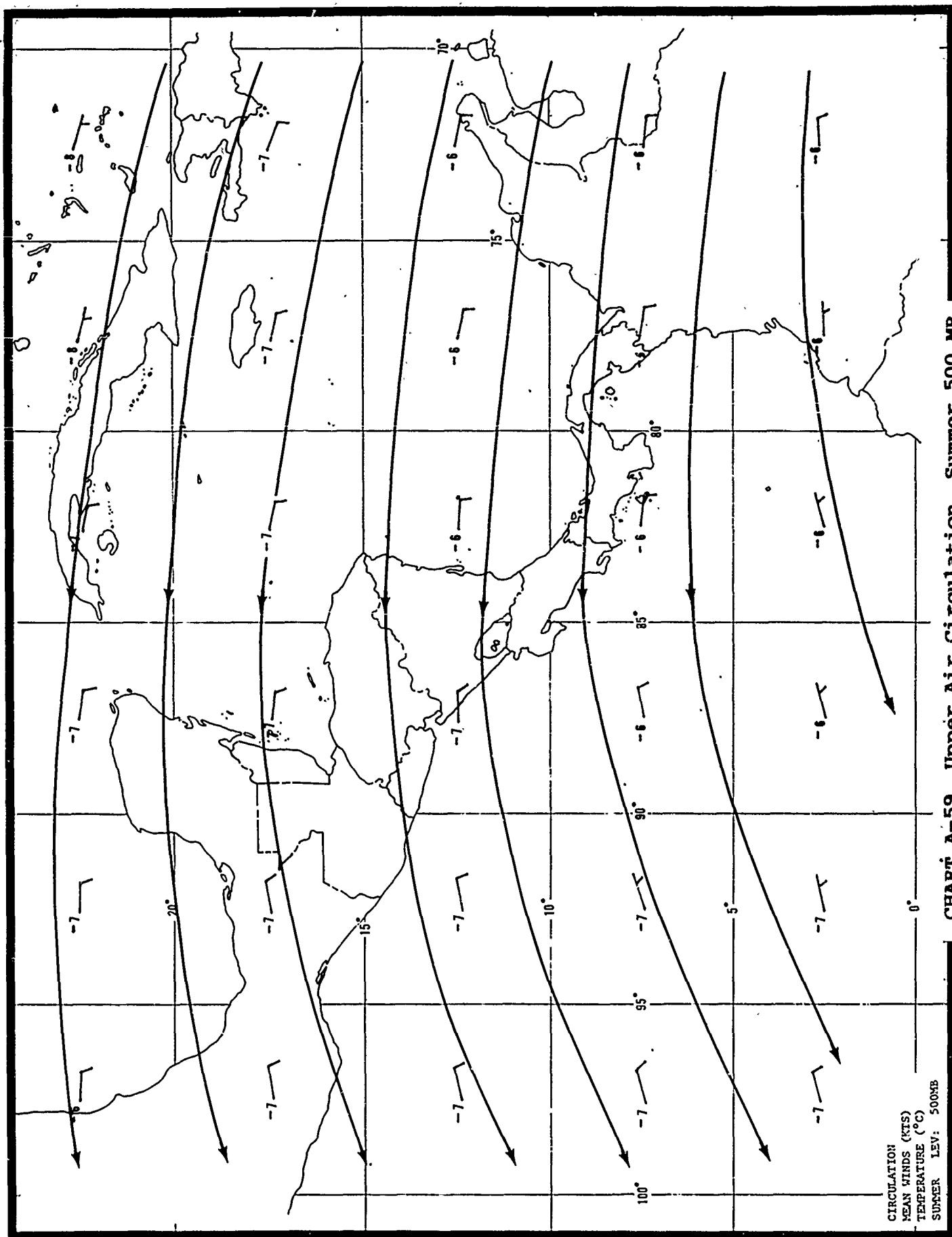
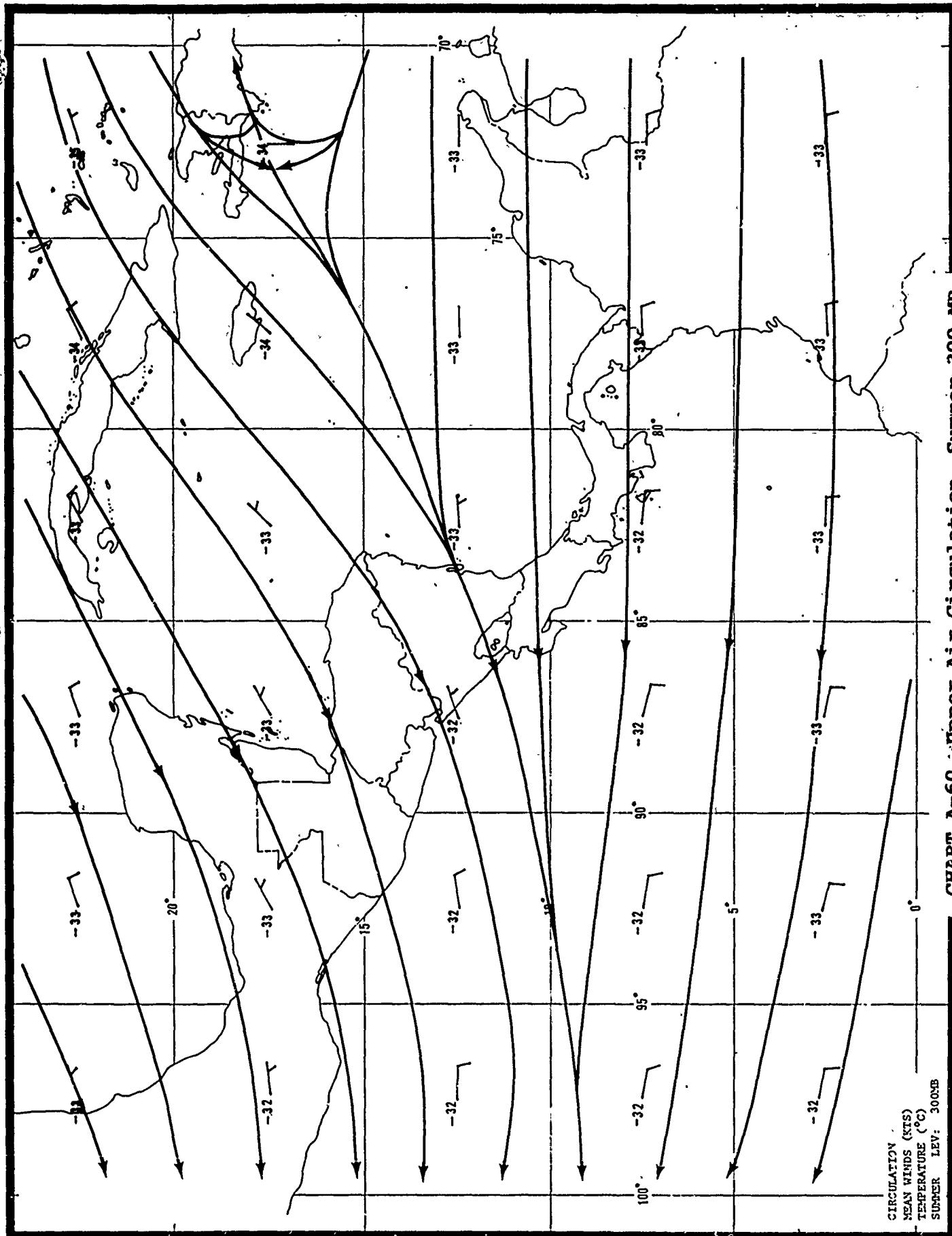
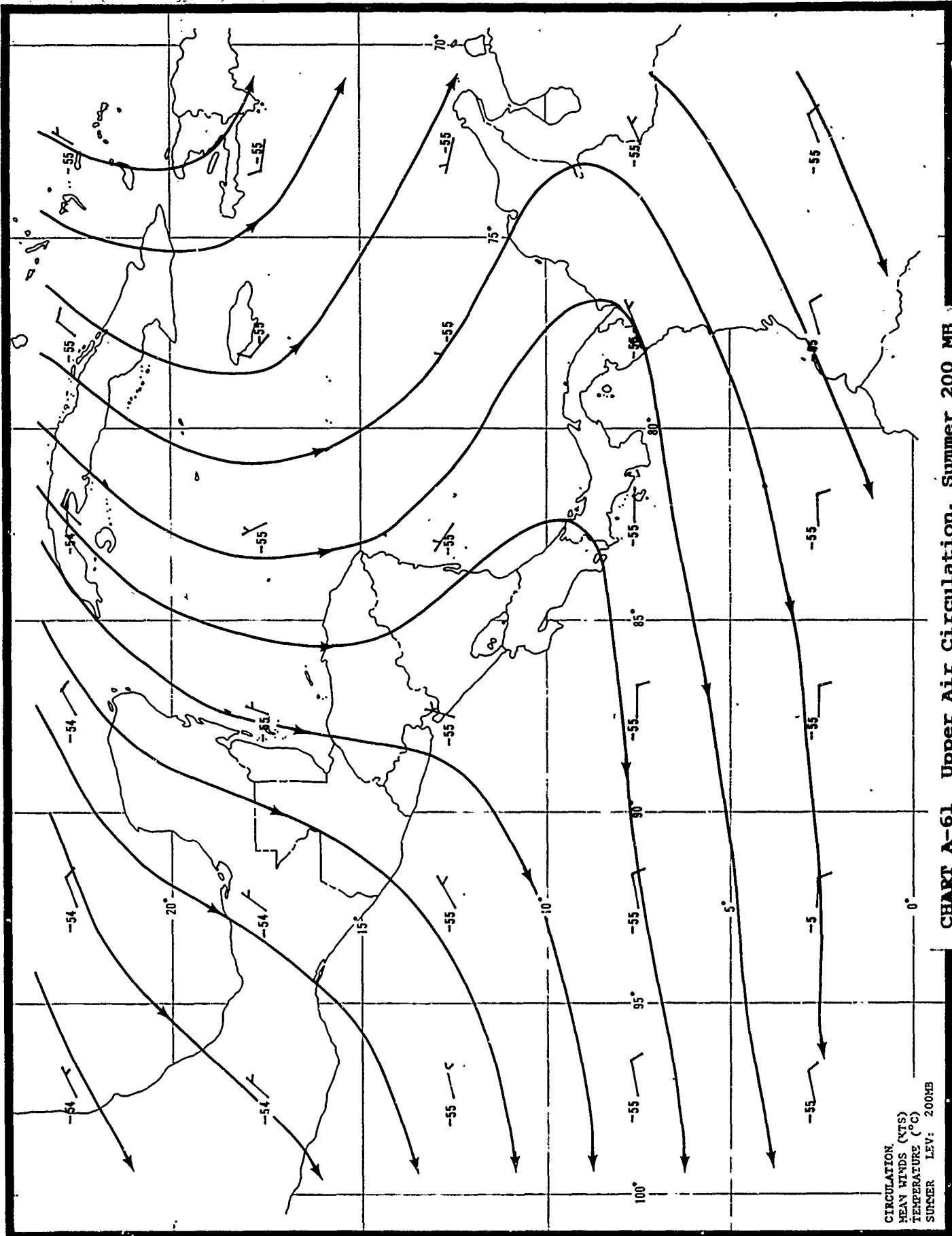


CHART A-59 Upper Air circulation, Summer 500 MB

CHART A-60 - Upper Air circulation, Summer 300 MB

CIRCULATION
MEAN WINDS (KTS)
TEMPERATURE (°C)
SUMMER LEV: 300MB





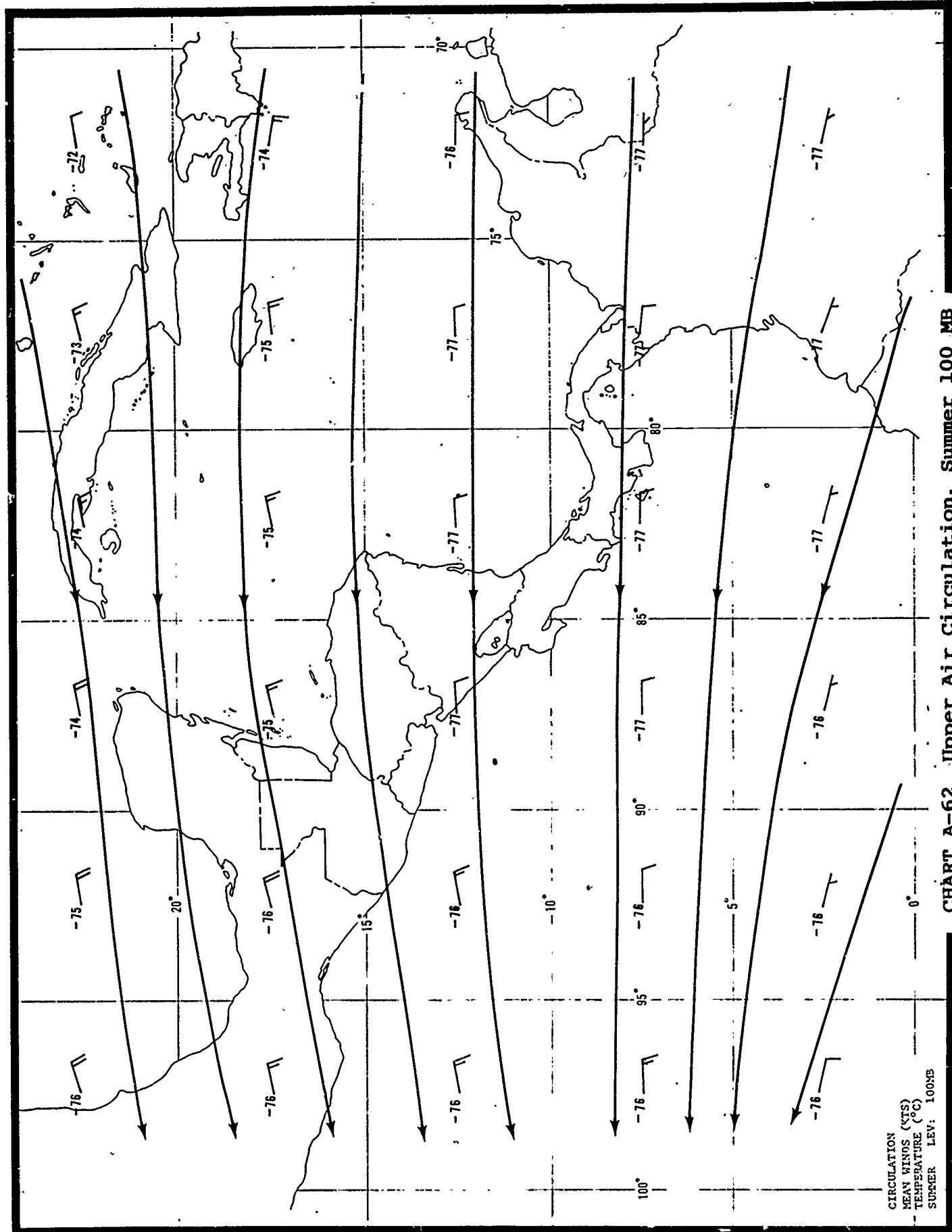


CHART A-63 Upper Air circulation, Fall 850 MB

CIRCULATION
MEAN WINDS (KTS)
TEMPERATURE ($^{\circ}$ C)
FALL LEV: 850MB

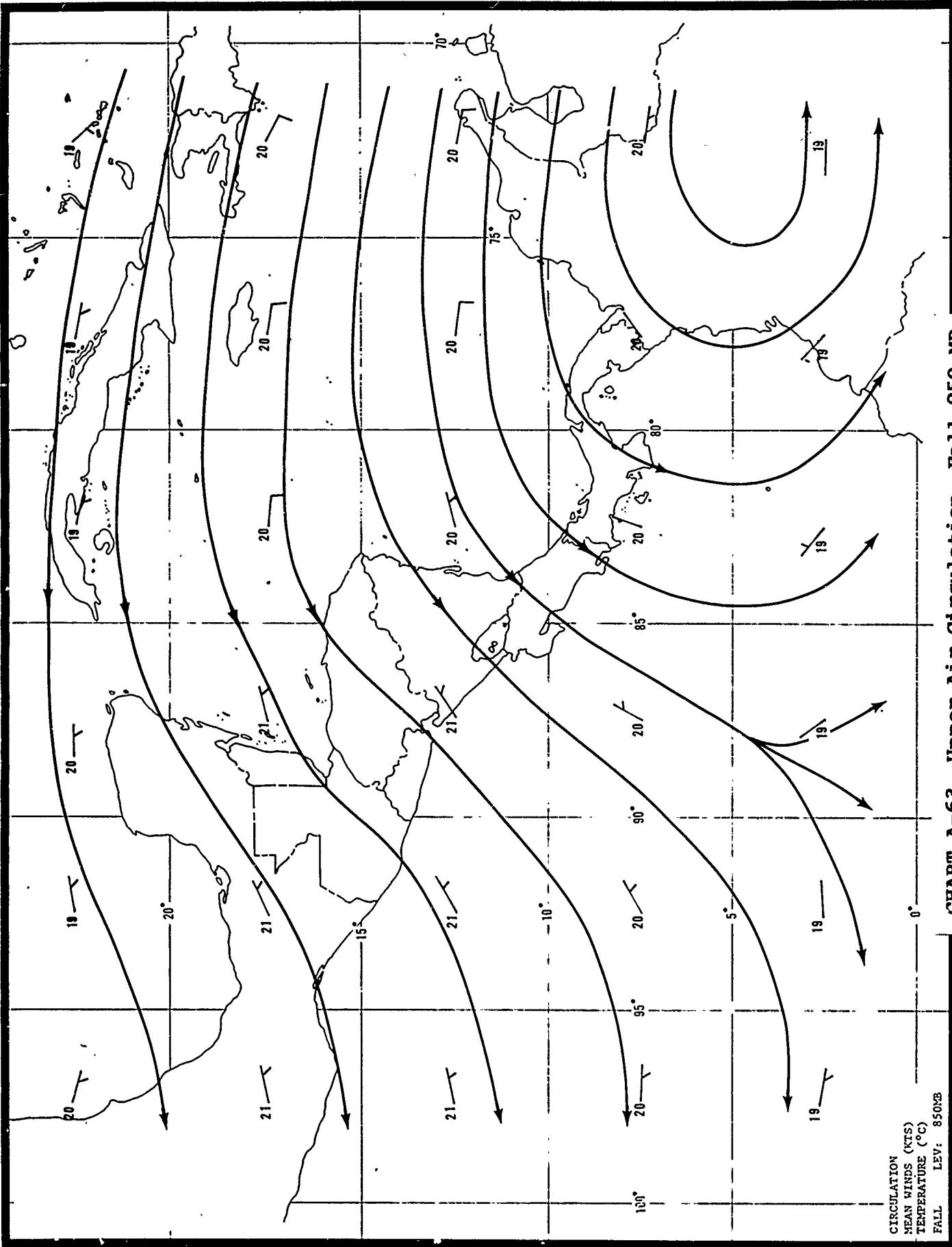


CHART A-64 Upper Air Circulation, Fall 500 MB

CIRCULATION
MEAN WINDS (KTS)
TEMPERATURE ($^{\circ}$ C)
FALL LEV: 500MB

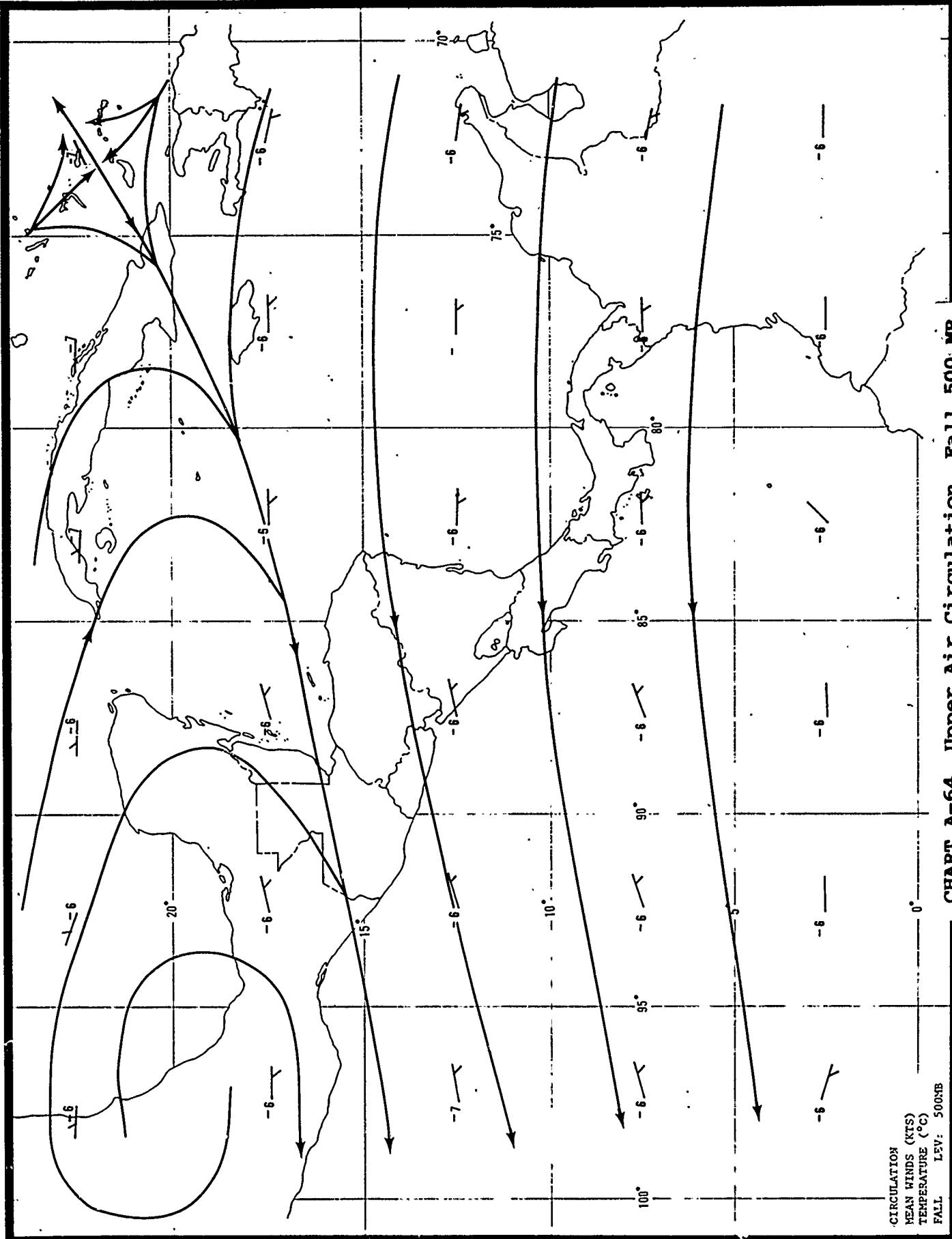
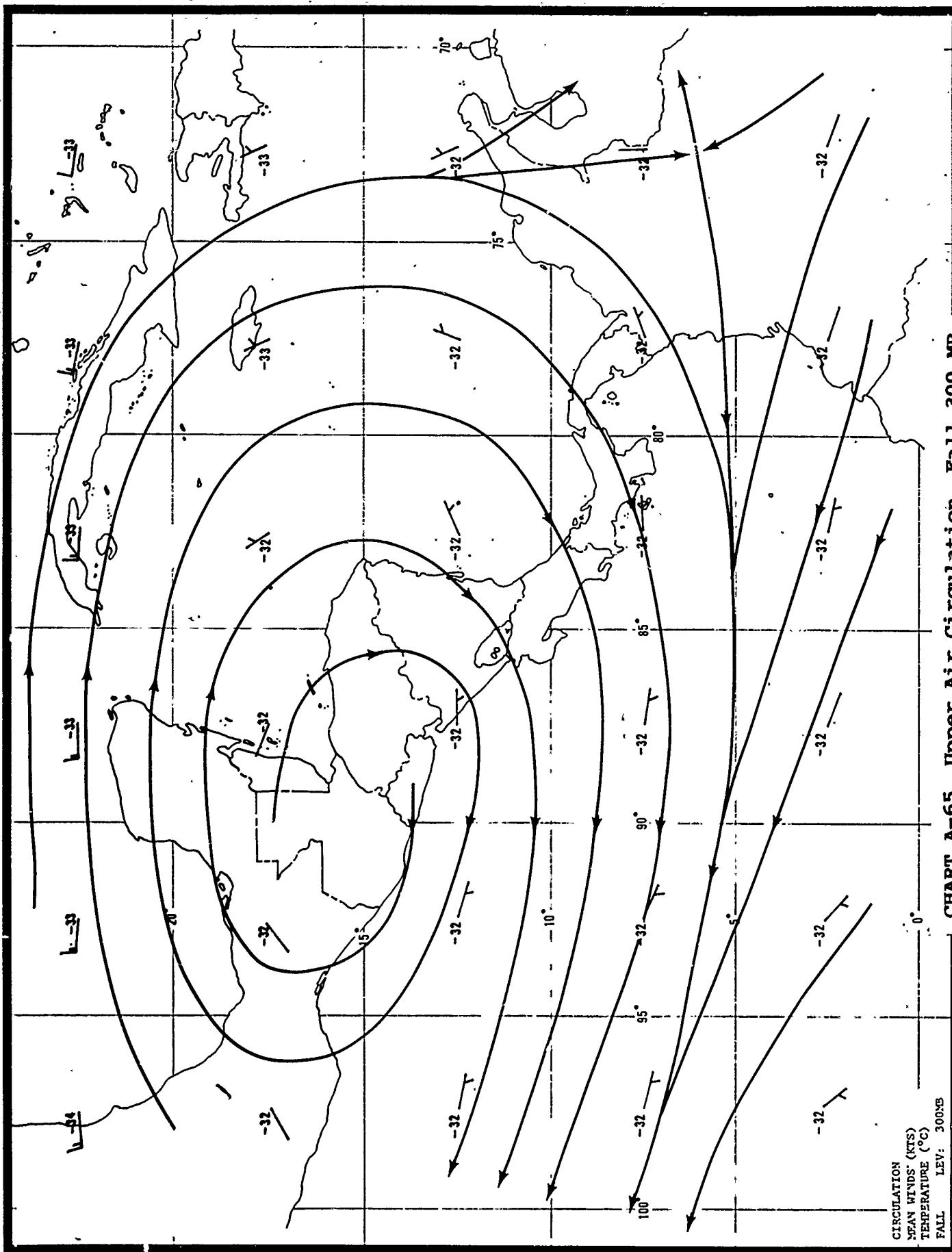


CHART A-65 Upper Air circulation, Fall 300 MB

CIRCULATION
MEAN WINDS' (KTS)
TEMPERATURE (°C)
FALL
LEV.: 300MB



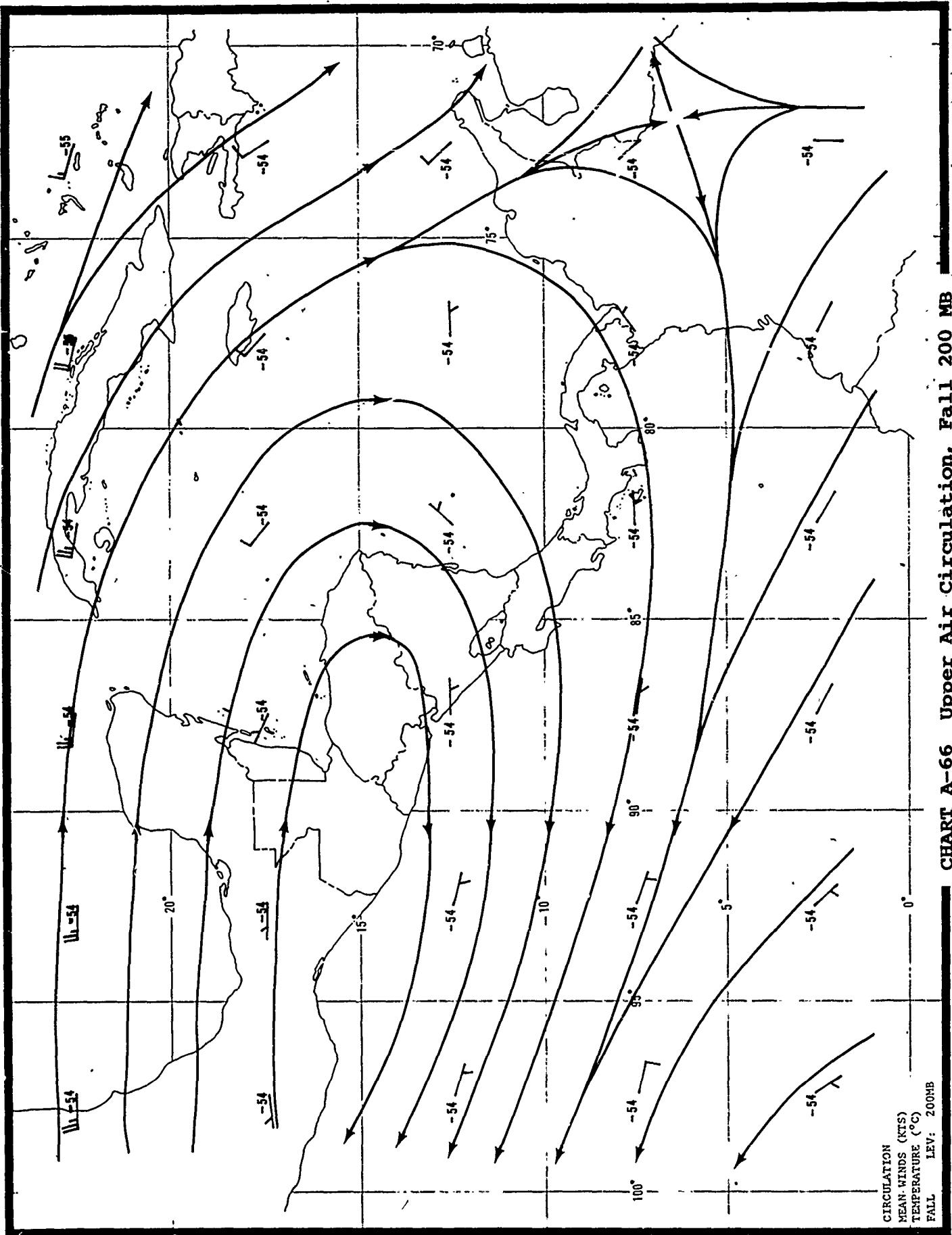


CHART A-66 Upper Air circulation, Fall 200 MB

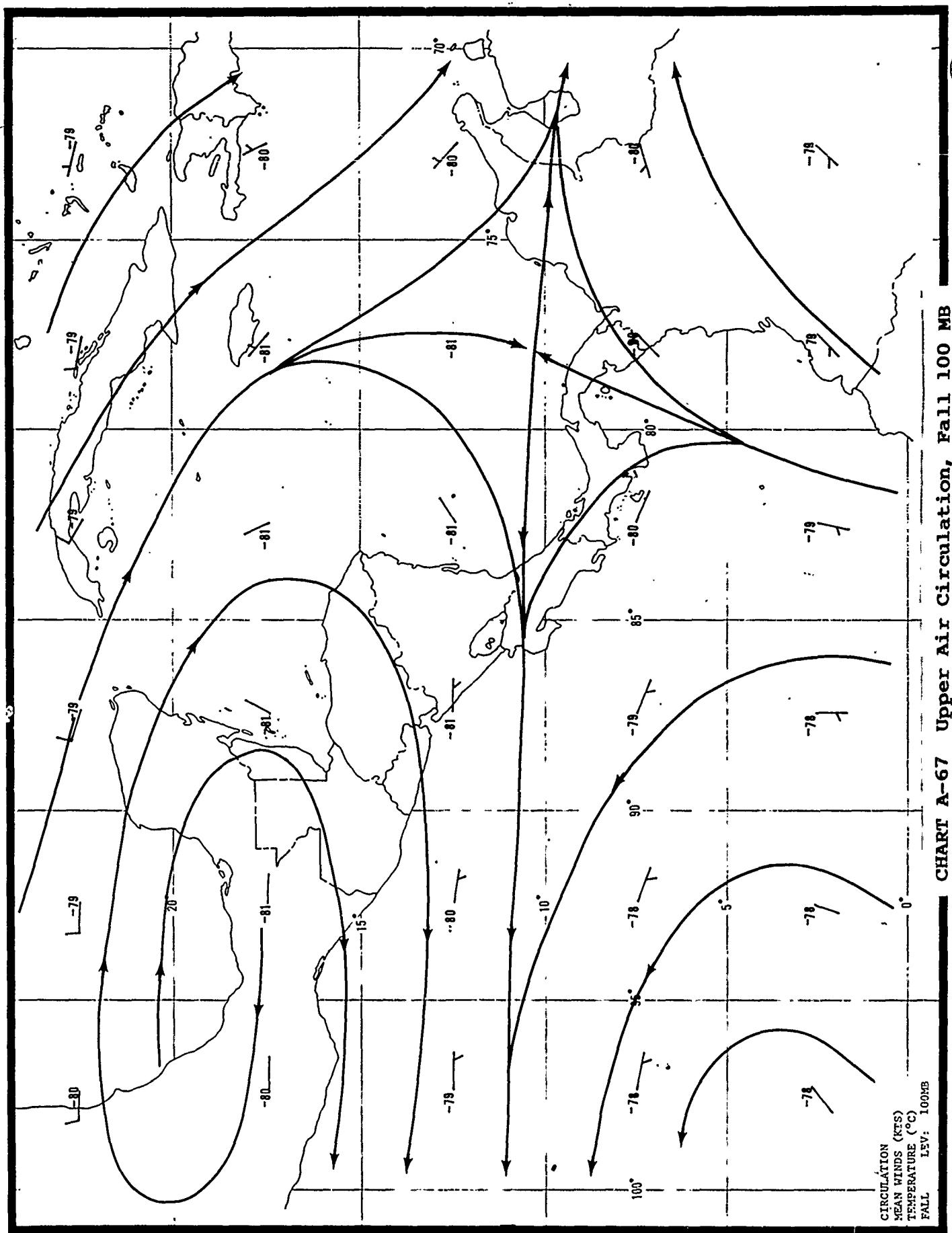


CHART A-67 Upper Air Circulation, Fall 100 MB

CIRCULATION
MEAN WINDS (KTS)
TEMPERATURE (°C)
FALL LEV: 100MB

APPENDIX B

Expanded Data Tables

This appendix contains expanded data tables for a number of climatic variables. Most (but not all) tables contain data for all 12 months, and for the hours of 00Z, 06Z, 12Z, and 18Z. Country names are abbreviated as follows:

BZ	Belize
CS	Costa Rica
ES	El Salvador
GU	Guatemala
HO	Honduras
NK	Nicaragua
PM	Panama

In assembling these tables, station-to-station and year-to-year data availability ranged from poor to excellent. Hourly surface observations, when available, were taken from the USAF Environmental Technical Applications Center (USAFETAC) DATSAV data base, period of record 1973 to 1981. Total sky cover data were obtained from the 3DNEPH data base, period of record 1977 to 1979. Summary-of-the-day data (24-hour precipitation, extreme temperature, etc.) were obtained from numerous sources, including other published data, foreign annuals and bulletins, satellite photographs, and raw data. Periods of record varied with the sources.

Satellite photographs used were from USAF, Defense Meteorological Satellite Program (DMSP) film transparencies archived for NOAA/EDIS by the University of Colorado, and the CIRES/National Snow and Ice Data Center.

All Data were quality-controlled by manual or automated procedures. They were then summarized for presentation in a form useable by analysts. If any data were judged to be inaccurate or nonrepresentative because of raw data scarcity, observing peculiarities, or other shortcomings, they were subjectively altered, normalized, or deleted before inclusion in the final product. Those decisions were made by experienced meteorologists who tried to produce the best, most comprehensive data tables possible from the resources available to them.

TABLE B-1 Mean Monthly Precipitation

	LAT	LON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	
AUGUSTINE PINE 10 BELIZE	82 17.98	88.72	4.40	1.89	2.26	2.06	2.80	7.78	5.06	6.31	10.89	5.98	7.84	3.14	64.41	
CENTRAL FARM	82 17.50	88.18	5.34	2.49	1.51	2.02	4.13	8.09	6.43	6.60	9.24	12.10	8.22	7.30	73.47	
COHOMA CAIRN	82 16.43	88.83	5.28	1.67	2.18	1.91	2.42	9.74	10.06	7.34	7.28	5.88	6.18	3.03	62.97	
COROZAL	82 17.00	88.40	2.98	3.18	2.66	2.43	2.72	9.76	9.09	5.77	10.61	9.00	12.95	5.63	80.70	
GRACIE ROCK	82 17.37	88.45	4.08	2.67	2.91	1.76	5.16	7.71	7.85	6.27	10.93	5.00	4.10	4.38	58.53	
HACHACA	82 16.20	88.90	8.66	4.19	5.40	2.73	5.79	19.51	24.16	19.36	17.01	10.38	8.24	5.44	130.87	
MANGO CREEK	82 16.55	88.58	4.78	3.03	1.87	1.84	5.22	14.30	15.03	11.40	13.19	11.34	7.68	4.53	94.21	
MIDDLESEX	82 17.03	88.52	6.62	3.72	3.40	6.25	14.62	21.55	13.99	10.54	9.22	6.22	11.08	101.08		
POMONA	82 17.00	88.37	6.79	3.17	3.37	3.40	6.19	11.70	17.92	11.05	12.67	9.65	9.48	5.80	101.18	
STANN CREEK AGR	82 16.97	88.22	5.73	2.77	2.96	3.02	5.45	10.31	11.46	9.94	10.85	10.43	10.11	6.12	89.15	
AGUA BUENA	CS 8.73	82.92	2.08	1.17	2.68	4.52	14.25	15.48	12.55	13.01	17.80	23.13	11.27	5.38	123.32	
ARGENTINA GRECIA	CS 10.03	84.35	0.24	0.20	0.39	1.81	11.81	12.76	10.24	10.31	13.74	16.61	6.02	1.73	85.83	
BARTOLO	CS 9.42	84.10	0.68	1.24	4.96	18.06	17.64	18.43	17.14	15.79	17.62	7.88	151.81			
COLORADO	CS 10.73	83.58	23.27	10.87	6.34	17.56	21.26	30.75	29.09	13.94	18.58	22.91	36.91	244.92		
COTO 26	CS 8.53	83.05	3.89	1.97	2.72	5.33	12.13	12.70	12.32	13.50	12.67	21.96	13.19	5.49	117.87	
GOOD HOPE	CS 10.07	83.32	10.55	7.95	6.22	7.72	10.87	10.51	13.66	10.35	4.25	8.86	14.41	18.54	123.82	
JUAN VIVAS	CS 9.57	83.73	13.46	8.58	6.06	7.01	13.07	12.95	14.53	10.24	11.06	11.61	15.59	18.54	146.65	
LIMON	CS 10.00	83.05	12.72	9.06	8.50	9.65	12.68	11.97	16.18	12.72	4.76	9.69	15.24	19.65	142.79	
LOS DIAMANTES	CS 10.22	83.77	11.22	7.64	6.46	8.82	17.60	18.19	18.58	13.07	11.26	15.91	18.35	20.67	167.79	
NARANJO	CS 10.10	84.37	0.12	0.47	0.35	2.20	7.56	12.87	11.61	13.66	18.58	14.25	6.85	2.48	91.02	
NICOYA	CS 10.15	85.45	0.16	0.63	0.94	2.44	9.57	13.58	10.16	13.70	14.92	16.61	5.12	0.47	88.27	
ORTINA	CS 9.88	84.52	0.12	0.67	0.55	3.19	13.03	12.60	11.97	11.69	15.47	17.32	7.83	0.79	95.20	
PUERTO VIEJO	CS 10.43	83.98	10.67	8.70	6.26	8.19	17.72	15.39	19.84	15.75	9.09	13.50	16.02	18.82	159.92	
QUEBRAADA GRANDE	CS 10.83	85.50	0.98	0.51	0.55	0.83	6.61	6.41	6.89	9.25	13.54	12.20	5.87	3.43	82.95	
SAN JOAQUIN FLORES	CS 10.02	84.13	0.20	0.31	0.83	2.72	11.34	11.97	8.15	9.17	13.07	16.34	6.34	1.89	85.71	
SAN MIGUEL BARRANCA	CS 10.00	84.68	0.16	0.20	0.08	1.89	11.42	13.23	10.94	10.31	13.07	15.91	6.46	2.05	77.83	
SANTA CRUZ	CS 10.27	85.62	0.12	0.00	0.04	0.43	12.20	12.28	8.78	5.94	15.00	19.57	2.60	0.91	77.83	
TURRIALBA	CS 9.88	83.63	6.73	4.49	3.11	3.90	8.54	9.72	10.20	8.15	8.15	9.49	10.71	11.81	94.92	
ACAJUTLA	ES 13.57	89.83	0.08	0.04	0.86	2.03	6.89	11.73	10.43	10.91	13.18	10.33	1.21	0.19	67.86	
APOPA	ES 13.80	89.18	0.20	0.12	0.24	2.28	8.23	13.46	13.27	13.39	13.90	8.70	1.30	0.20	75.29	
COATEPEQUE	ES 13.90	89.83	0.12	0.04	0.20	1.93	7.64	13.15	11.97	12.17	12.99	7.13	1.26	0.24	69.54	
COJUTEPEQUE	ES 13.72	88.93	0.16	0.00	0.35	1.89	7.91	15.32	15.04	14.06	14.29	10.87	1.50	0.28	81.67	
CUTUCO	ES 13.33	87.82	0.04	0.04	0.24	1.10	10.63	14.41	7.48	10.75	18.58	13.70	1.97	0.32	79.26	
EL CONGO	ES 13.90	89.50	0.12	0.04	0.43	1.04	1.65	7.60	13.23	11.18	11.89	12.64	7.80	1.30	0.20	67.85
FCA. SAN JOSE	ES 13.73	89.30	0.39	0.24	0.26	2.36	9.41	19.45	15.55	14.92	18.78	13.23	1.97	0.16	96.99	
LA TOMA	ES 13.85	89.28	0.16	0.16	0.20	2.01	7.91	12.91	13.62	12.76	15.08	7.44	1.22	0.24	73.60	
METAPAN	ES 14.33	89.47	0.04	0.16	0.79	1.65	7.13	11.97	9.41	8.98	12.72	6.89	0.47	0.28	60.49	
SAN MIGUEL	ES 13.48	88.18	0.04	0.00	0.16	0.91	8.54	11.73	9.61	10.35	14.61	11.69	1.65	0.32	69.61	
SANTA ANA	ES 13.98	89.57	0.08	0.00	0.20	1.89	7.52	11.89	10.94	11.65	13.39	12.32	0.91	0.20	65.99	
SONSONATE	ES 13.72	89.73	0.12	0.12	0.24	1.85	7.60	13.39	11.81	11.81	14.09	12.76	1.10	0.32	75.00	
TEXIS JUNCTION	ES 14.10	89.52	0.08	0.08	0.35	2.20	7.80	11.73	11.73	11.50	14.57	7.48	1.02	0.32	68.86	
VALLE SAN JUAN	ES 13.35	88.62	0.00	0.08	0.20	0.94	6.54	13.23	11.42	11.10	15.04	14.17	1.93	0.16	74.81	
ZACATECOLUCA	ES 13.50	88.87	0.08	0.08	0.28	1.57	9.61	15.63	13.35	13.58	18.43	14.89	2.20	0.43	89.33	
AGUA BLanca	GU 14.52	89.62	0.00	0.04	0.08	0.24	2.28	4.61	4.61	5.16	6.57	2.76	0.20	0.24	26.81	
ANGUIATU	GU 14.35	89.58	0.00	0.04	0.08	1.65	5.43	4.49	4.41	5.24	2.36	0.39	0.04	24.61		
ANTIGUA	GU 14.55	90.73	0.08	0.12	0.12	0.71	4.21	6.97	5.98	4.72	7.83	5.28	1.38	0.12	37.52	
BELIZ	GU 14.67	90.63	1.18	0.91	3.70	6.77	18.86	26.14	22.56	22.01	31.38	25.94	7.52	2.17	169.09	
BUENA VISTA	GU 14.62	91.63	1.26	1.42	4.13	7.28	17.40	19.45	17.52	17.09	26.46	24.09	7.64	1.50	145.00	
CASTANEDA	GU 14.63	89.43	0.04	0.08	0.55	0.98	5.83	10.31	7.91	9.13	12.76	5.87	0.75	0.39	54.57	
CHAMPERICO	GU 14.30	91.92	0.31	0.04	0.16	0.55	3.78	6.69	4.25	7.48	10.12	0.51	0.16	38.66		
CHIACAM	GU 15.55	90.10	6.18	5.20	3.98	4.72	10.43	21.81	21.97	17.64	19.88	10.16	7.24	146.57		
CHINASUB	GU 15.60	90.47	11.38	8.90	7.87	9.61	11.10	19.92	18.78	14.88	19.76	27.52	20.59	15.87	186.18	
COATEPEQUE	GU 14.70	91.87	0.35	0.24	1.26	5.28	12.60	20.63	15.79	18.27	20.59	19.84	4.61	0.98	120.51	

TABLE B-1, Cont'd

LAT	LON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN	
CONCEPCION															
CREEK	90.78	0.55	0.47	3.31	5.75	18.23	24.09	22.99	16.30	26.22	20.71	5.08	0.83	136.61	
EL PASO	88.95	5.71	3.39	2.76	3.07	7.13	13.98	12.13	10.98	14.69	11.38	7.91	6.57	99.45	
EL RANCHO	90.23	1.93	1.61	1.22	2.09	6.73	9.29	7.83	7.52	11.93	10.94	4.76	3.50	69.37	
EL VALLE	90.00	0.04	0.08	0.08	0.51	3.39	5.24	3.15	2.01	4.96	3.03	0.39	0.08	22.95	
ENTRE RIOS	10.51	7.83	6.54	7.24	11.42	29.92	38.02	25.59	20.63	13.74	13.46	0.43	211.42		
FLORES	91.57	0.24	0.63	2.83	6.18	13.94	18.03	16.57	16.57	22.32	20.71	5.16	0.43	123.94	
GUATEMALA CITY	89.88	1.97	1.42	1.77	7.05	9.45	9.80	9.45	8.43	14.25	8.03	3.46	3.94	78.98	
GUAXAC	90.52	0.13	0.12	0.24	0.89	5.06	9.85	7.42	7.16	9.57	5.59	0.92	0.28	47.23	
LA GLORIA	90.13	3.43	3.23	2.44	2.95	10.08	20.20	19.37	14.41	19.80	12.83	5.43	3.58	115.91	
LA MORENA	90.28	0.24	0.16	0.91	2.76	11.77	19.53	9.88	13.19	23.03	17.56	1.97	0.51	101.50	
LA REUNION	90.37	0.12	0.20	0.31	1.57	7.01	15.55	10.87	9.80	15.91	11.21	0.59	74.41		
LAS DELICIAS	90.83	0.79	0.59	1.85	2.68	10.12	23.55	15.59	18.98	28.39	13.43	2.28	0.79	118.62	
LAS VINAL	91.02	0.91	0.87	2.68	4.72	15.75	22.95	14.53	15.83	27.72	15.51	2.05	1.06	124.45	
LOS BALSAMOS	90.43	0.35	0.20	0.91	2.01	9.21	14.09	10.00	11.22	10.43	11.06	1.97	0.59	75.94	
MAYAGUA	89.67	1.26	1.00	0.65	1.69	6.84	23.05	12.93	11.63	20.87	15.08	4.21	2.60	101.81	
MOCCA	90.90	4.84	3.62	3.15	4.72	11.46	21.69	21.81	17.72	20.63	12.48	5.40	4.69	130.00	
MORAN	90.53	0.04	0.04	0.04	0.12	0.59	4.29	9.37	8.46	8.62	5.79	0.83	0.16	46.73	
HORELIA	90.97	2.01	2.32	3.82	7.91	24.13	31.69	24.65	27.76	36.69	31.93	7.05	2.91	202.87	
PALO GORDO	91.40	0.43	0.87	2.36	4.76	15.55	23.94	18.35	18.90	22.87	24.72	7.48	1.30	141.54	
PAMPJILA	91.13	0.24	0.35	0.91	1.81	8.23	17.95	10.51	10.51	18.78	10.24	1.61	0.59	81.73	
PANNEE PLAYA	88.82	5.20	2.83	2.48	2.72	5.39	9.76	8.78	7.48	10.51	9.61	6.62	80.08		
PENA PLATA	91.08	0.75	1.10	2.20	5.94	16.26	21.61	19.61	19.92	26.93	22.83	5.43	1.54	143.90	
PUERTO BARRIOS	88.60	7.76	4.53	3.98	5.24	8.39	10.87	19.09	12.24	12.32	14.57	11.97	10.16	121.06	
QUIRIGUA	89.07	4.33	2.48	2.56	2.52	7.32	12.13	11.54	9.84	13.35	9.06	7.44	6.18	88.78	
SAN JOSE	90.82	0.00	0.04	0.39	1.50	4.41	9.92	9.76	8.78	10.79	10.91	0.83	0.04	57.36	
SAN RAFAEL PANAN	91.25	1.14	1.14	1.42	19.65	24.65	17.36	20.67	27.44	21.18	6.46	2.20	159.17		
SANARATE	90.20	0.00	0.08	0.16	0.55	3.35	5.28	3.11	2.95	6.61	3.35	0.20	0.28	25.94	
SANTA TERESA	91.90	2.91	1.77	5.04	11.06	22.76	27.09	19.76	22.83	29.65	23.82	6.73	3.07	176.50	
SEPACUITE	89.78	8.31	5.47	3.98	4.84	11.38	23.03	25.98	19.49	20.35	16.02	10.55	8.46	157.76	
TENEDORES	88.63	4.21	1.81	1.65	1.97	4.13	7.24	9.49	9.02	8.03	8.94	6.97	4.80	68.31	
TINAJAS	89.67	4.41	1.89	2.24	3.15	9.02	15.51	20.28	15.35	16.14	7.87	4.09	4.13	104.13	
WESTFALIA	89.90	3.50	2.13	2.09	2.99	7.44	13.82	15.98	12.60	13.70	9.13	4.41	3.58	91.34	
AGUA CALIENTE	87.30	1.18	0.79	1.14	1.73	5.87	8.46	6.77	5.67	7.72	6.50	1.61	50.08		
AMAPA	87.98	2.20	1.46	0.83	1.18	4.53	10.67	11.77	9.49	13.54	8.98	4.96	3.23	72.91	
CATACAMAS	85.93	1.82	0.79	0.55	1.19	5.09	9.19	8.87	6.36	7.19	6.28	2.62	1.74	51.69	
CHOLUTECA	87.18	0.80	0.39	0.63	0.87	10.39	15.00	6.07	8.14	15.80	12.90	2.00	2.00	73.57	
CHUMBAQUA	88.47	1.89	1.26	1.18	1.50	3.82	10.20	7.68	6.18	8.07	6.97	4.06	3.43	56.22	
COHAYAGUA	87.63	0.55	0.35	0.28	1.38	4.45	7.56	5.39	6.57	5.59	5.98	1.73	0.91	44.68	
COYOLES	86.68	2.09	1.22	0.63	0.79	2.32	5.28	3.86	2.87	4.53	4.92	4.21	3.19	35.91	
DULCE NOMBRE	88.83	1.85	0.79	0.94	1.38	4.57	9.80	7.99	6.02	10.12	6.18	2.91	2.56	55.12	
EL ZAHORANO	87.03	0.55	0.39	0.47	1.26	5.24	9.53	6.06	5.20	7.52	5.63	1.77	0.91	44.09	
FINCA #17	87.88	2.20	1.57	1.14	1.02	4.06	9.21	8.03	6.26	9.53	6.85	7.20	4.57	61.65	
GUANACASTAL	87.83	3.19	2.13	1.54	1.97	8.98	8.78	5.12	7.72	10.94	7.48	5.67	67.24		
GUANAJA	85.92	8.61	3.93	2.73	2.64	4.79	8.97	6.11	5.22	16.95	16.50	13.99	9.30		
HAC. SAN ISIDRO	86.57	1.10	0.39	0.67	1.06	3.90	8.74	6.57	4.72	5.63	6.57	2.52	0.91	42.80	
JUTIAPA	86.57	2.72	1.18	0.83	1.06	8.82	10.87	8.58	6.69	12.72	8.94	4.17	5.24	71.81	
LA CEIBA	88.17	2.05	1.14	1.38	0.67	5.28	8.07	7.76	7.80	7.17	7.17	3.86	1.61	52.04	
LA MESA	86.83	13.94	8.70	5.24	4.25	3.66	4.88	5.04	5.87	8.43	15.24	11.26	16.54	103.03	
LA MANI	87.93	2.36	2.09	1.34	1.26	2.76	6.30	4.65	3.54	6.22	6.89	4.76	4.72	46.89	
LOS PLANES	86.40	6.06	3.70	2.56	2.32	5.67	8.07	4.17	6.38	7.76	11.50	11.46	8.35	77.20	
MANACAL	15.38	88.17	2.05	1.14	1.26	1.38	2.40	6.69	6.06	4.69	6.69	6.10	3.78	3.11	45.35
MARCLIA	14.12	88.00	0.24	0.08	1.26	1.42	1.24	1.41	1.05	5.79	10.39	9.72	12.68	5.67	31
MINAS SAN ANDRES	88.93	0.63	0.94	0.63	1.54	5.91	12.05	9.21	8.35	16.18	4.65	2.80	1.26	64.13	
MOROCELLI	14.13	86.88	0.08	0.08	0.12	0.31	5.15	5.87	2.72	4.02	4.45	3.98	1.22	26.10	

TABLE B-1, Cont'd

	LAT	LON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
NVO OCOTEPEQUE	14.43	89.17	0.55	0.16	0.75	1.89	5.31	10.00	8.23	7.68	10.16	4.92	1.26	0.51	51.42
NVO ROSARIO	14.22	87.08	1.85	0.94	0.91	1.65	7.09	9.57	6.89	5.67	8.50	8.58	3.66	2.32	57.64
PENA BLANCA	14.93	86.05	5.79	3.90	3.09	2.28	7.09	17.24	22.48	19.84	15.00	8.03	6.89	12.86	128.86
PROGRESO	15.35	87.97	3.46	2.36	1.81	1.65	3.35	6.46	6.89	5.35	7.13	8.31	8.54	5.87	61.18
PUERTO CORTES	15.80	87.93	11.50	5.16	4.88	4.25	4.96	6.46	7.56	7.72	8.86	9.41	17.87	14.80	113.43
PUERTO LEMPIRA	15.22	83.78	7.47	3.62	2.26	2.53	6.96	12.86	10.77	10.51	10.64	15.40	14.51	8.81	106.28
SABANAGRANDE	13.82	87.27	0.12	0.16	0.51	1.65	6.50	9.53	2.83	2.72	10.55	6.22	1.06	7.24	49.02
SAN ALEJO	15.63	87.57	8.78	6.73	3.98	3.98	3.54	9.35	7.76	3.66	2.13	8.03	14.84	13.03	99.76
SAN MARCOS	13.42	86.82	0.88	0.39	0.71	1.30	10.08	7.76	3.23	6.06	4.61	7.52	5.67	4.72	44.49
SAN PEDRO SULA	15.47	88.02	2.83	2.05	2.01	1.42	3.62	6.26	6.05	3.23	3.65	7.20	5.49	4.50	64.65
TEGUCIGALPA	14.05	87.22	0.38	0.18	0.30	1.16	6.07	6.05	3.23	3.65	7.20	5.49	4.50	0.50	35.69
TELA	15.72	87.48	9.62	6.92	3.18	3.21	3.71	5.43	6.88	8.94	6.52	14.03	16.04	14.41	100.85
TRUJILLO	15.92	85.98	13.35	8.07	4.41	2.91	4.29	5.47	4.29	4.29	6.34	17.24	21.43	15.63	106.93
URRACO	15.55	87.77	5.35	3.19	2.09	1.93	3.23	5.63	6.58	6.26	6.57	8.66	11.85	7.32	68.62
VERACRUZ	14.90	88.78	1.77	0.87	1.02	1.22	5.51	11.77	9.13	7.48	11.34	7.20	3.43	2.68	63.43
YORO	15.17	87.12	1.06	1.18	0.59	1.22	5.16	6.14	4.29	3.94	6.02	6.18	4.09	2.20	42.09
ZACAPA	14.68	88.07	1.93	1.46	1.42	1.18	4.29	9.57	10.12	8.90	10.87	9.45	4.09	2.44	65.71
BLUEFIELDS	12.00	83.72	9.96	4.09	2.80	3.86	13.74	19.92	31.54	24.37	12.48	13.19	14.29	14.13	164.37
CARATERA	13.22	85.75	4.37	1.93	1.34	1.46	8.86	13.98	16.54	9.72	10.43	11.30	6.57	4.69	91.14
CIUDAD RIVAS	11.43	85.85	0.43	0.20	0.16	0.20	7.60	11.57	6.93	11.65	12.83	3.07	0.91	62.48	
COLON	11.12	85.47	3.15	1.85	0.67	0.75	7.32	13.31	12.87	10.12	10.59	11.77	7.52	6.06	85.94
ESTELI	13.08	86.38	0.08	0.12	0.28	0.98	4.25	7.80	2.72	3.11	7.24	8.74	1.42	0.91	37.64
GRANADA	11.93	85.95	0.20	0.08	0.24	0.83	6.02	11.26	6.42	6.73	10.38	2.99	0.91	57.76	
JINOTEGA	13.10	86.00	1.54	0.91	0.43	0.43	5.51	7.28	5.83	4.84	6.46	8.58	2.24	1.73	45.79
JUIGALPA	12.12	85.37	0.39	0.16	0.08	0.31	7.09	9.21	5.94	6.18	11.85	10.47	2.80	1.02	55.51
LEON	12.45	86.87	0.00	0.00	0.00	0.75	5.71	12.60	5.20	6.02	8.90	15.75	4.37	3.39	62.68
LOS PILARES	10.83	83.97	9.33	5.63	2.48	3.50	9.72	17.17	16.89	14.69	13.19	10.39	10.67	12.87	126.54
MANAGUA	12.15	86.28	0.12	0.04	0.12	0.12	0.79	8.31	5.35	4.33	8.50	11.50	1.73	0.39	46.65
MATAGALPA	12.88	85.95	1.22	0.51	0.51	0.71	5.35	9.84	7.17	6.10	9.61	9.02	2.68	0.83	53.54
MUHAN	12.13	84.97	2.40	2.09	0.83	1.06	6.61	12.44	11.42	11.46	9.41	10.55	8.74	4.21	81.22
PUERTO CABEZAS	14.03	83.40	6.52	3.27	1.50	2.02	10.44	16.97	18.81	14.41	10.94	13.18	13.95	11.01	123.02
SAN ANTONIO	12.58	87.08	0.04	0.04	0.12	0.94	9.72	13.35	7.64	10.43	15.98	20.20	3.11	0.28	81.73
SAN JUAN DEL NORTE	10.93	83.70	17.17	11.26	4.80	6.73	15.28	23.86	31.81	22.83	13.94	21.50	35.39	30.98	235.55
SAN MARCOS	11.83	86.20	0.67	0.24	0.31	0.35	8.70	12.60	6.38	7.28	12.68	17.09	3.11	1.54	70.87
SAN MIGUELITO	11.38	84.90	2.87	1.22	0.63	0.75	6.65	16.50	16.81	14.80	14.92	14.06	6.14	4.25	99.57
SAN UBALDO	11.83	85.33	0.71	0.16	0.08	0.51	6.06	9.17	7.48	7.52	11.10	10.55	3.58	1.34	58.31
SIUNA	13.67	84.58	2.87	2.41	1.02	1.39	8.26	14.33	10.73	9.23	11.09	9.47	4.72	3.42	78.68
ALANJE	8.30	82.53	0.75	2.95	0.67	5.59	8.90	10.51	10.39	12.91	10.98	15.31	11.10	5.24	95.31
ALTO LINO	8.60	82.50	7.64	4.34	3.98	3.52	17.37	17.33	12.08	8.43	12.47	19.06	11.52	12.58	130.31
BALBOA HEIGHTS	8.97	79.55	1.69	0.60	0.55	2.40	8.47	7.85	8.00	8.47	7.55	11.23	10.81	5.67	73.29
BOCA DE CUPE	8.05	77.58	1.65	2.09	2.13	6.22	12.91	13.54	9.69	8.74	7.95	7.72	6.69	3.19	82.52
CALDERA	8.65	82.38	0.67	2.95	4.09	9.02	12.09	17.32	16.34	16.73	25.28	34.09	13.07	2.60	154.25
CAMERON	8.07	81.65	0.55	1.65	1.30	6.46	10.63	18.98	18.97	18.66	21.02	31.97	23.43	4.80	155.31
CHANGUINOLA	9.48	82.48	7.40	4.65	5.67	4.96	8.11	7.48	9.53	7.17	2.40	6.45	9.69	5.53	80.75
CHORRO	8.97	79.98	2.79	1.05	1.19	3.27	11.17	8.76	8.47	10.61	12.36	12.62	14.72	8.24	95.25
CRISTOBAL	9.35	79.92	3.31	1.55	1.48	4.04	12.49	13.09	15.47	15.40	12.50	22.63	12.13	12.59	
GAMBOA	9.12	79.70	1.46	0.71	0.56	3.04	10.39	9.67	9.82	10.51	9.79	12.21	12.21	6.22	86.59
GATUN	9.27	79.93	3.29	1.85	1.76	4.76	12.91	11.56	12.77	13.64	11.33	21.61	12.31	12.98	
HOWARD AFB	8.91	79.60	0.60	1.81	0.48	3.36	7.72	7.26	7.07	7.47	6.95	9.93	9.54	5.38	67.57
ISLA GRANDE	9.63	79.57	2.38	1.59	0.89	1.88	11.24	10.26	11.40	11.16	9.35	11.79	18.01	11.17	101.82
HADDEN DAM	9.20	79.62	1.17	0.67	0.38	2.82	10.63	11.67	12.50	11.74	11.15	14.75	13.03	5.33	95.84
MONTE LIRIO	9.23	79.85	2.40	1.82	1.60	4.00	11.20	11.40	11.59	12.81	11.49	15.82	19.75	11.32	115.20
NARGANA	9.48	78.52	3.34	1.65	0.72	3.43	11.61	9.58	11.42	10.79	7.09	8.77	17.79	6.93	93.12
PEDRO MIGUEL	9.02	79.62	1.17	0.44	0.41	3.18	9.81	9.29	9.16	9.11	8.85	11.84	11.43	5.82	80.51
PELUCA	9.38	79.57	3.84	2.17	1.49	5.56	13.33	12.75	12.75	13.00	16.84	16.84	13.00	19.03	

TABLE B-1, Cont'd

	LAT	LON	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT.	NOV	DEC	ANN.
PUERTO ARMUELLES	PH	9.90	84.10	0.37	0.14	0.49	1.78	8.99	10.97	8.51	9.37	12.58	12.89	5.76	1.60
SALAMANCA	PH	9.32	79.58	1.36	0.77	0.42	2.88	10.37	11.78	11.44	12.01	14.31	14.24	6.43	73.43
SANTA CLARA	PH	8.40	80.12	0.43	0.11	0.08	0.61	6.08	5.55	4.33	5.49	4.99	7.32	6.77	3.03
SANTA ROSA	PH	8.20	80.67	0.37	0.38	0.05	1.40	8.47	7.99	6.67	7.69	9.13	13.89	9.72	2.82
TONOSI	PH	7.38	80.38	1.01	0.08	0.17	1.82	8.82	9.32	8.86	8.77	9.11	16.45	14.08	5.13
															83.62.

TABLE B-2 Days with Precipitation ≥ Specified Amount

	AMT	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
BELIZE INTL	1MM	B2	13	7	5	4	6	15	17	16	15	14	12	153
LIBERIA	TRACE	CS	*	*	*	1	8	15	12	12	17	16	5	1
LIMON	1MM	CS	11	17	17	13	15	18	15	15	12	15	19	186
PUNTARENAS	TRACE	CS	*	1	1	2	7	14	14	10	14	13	7	2
SAN JOSE	1MM	CS	1	1	1	6	19	19	17	21	24	19	13	3
ACAJUTLA	1MM	ES	1	0	2	3	9	17	15	16	16	13	3	1
SAN SALVADOR	TRACE	ES	*	1	1	5	13	19	21	22	21	21	5	1
SANTA ANA	TRACE	ES	*	1	1	5	13	19	21	17	18	12	3	1
FLORES	UNK	GU	11	5	3	7	16	18	20	19	14	13	11	142
GUATEMALA CITY	1MM	GU	1	1	1	3	9	16	15	16	15	12	4	1
HUEHUETENANGO	1MM	GU	1	1	1	4	12	14	10	12	14	12	*4	1
PUERTO BARRIOS	TRACE	GU	20	11	10	12	15	23	28	25	21	20	21	225
SAN JOSE	UNK	GU	*	1	3	8	12	12	13	15	12	3	*	79
CATACAHAS	1MM	HO	14	6	5	6	14	22	23	23	20	18	16	181
CHOLUTECA	1MM	HO	1	0	1	3	15	20	12	17	22	19	7	1
GUANAJA	1MM	HO	17	9	7	5	4	12	19	15	12	19	19	154
ISLAS DEL CISNE	1MM	HO	10	6	4	3	6	12	12	10	11	16	15	11
LA CEIBA	1MM	HO	14	9	3	6	7	12	14	18	16	16	15	145
PUERTO LEMPIRA	1MM	HO	21	12	11	8	14	20	22	23	22	24	22	220
SAN PEDRO SULA	1MM	HO	10	7	4	4	7	13	14	14	14	13	15	11
TEGUCIGALPA	1MM	HO	4	2	1	4	13	17	15	16	19	18	10	126
TELA	1MM	HO	16	12	8	6	7	13	18	21	16	18	19	17
BLUEFIELDS	TRACE	NK	22	15	12	11	17	25	29	26	21	21	22	243
JUIGALPA	TRACE	NK	8	4	1	2	8	16	18	14	18	17	12	6
PUERTO CABEZAS	TRACE	NK	18	11	8	8	14	21	26	22	19	20	19	204
RIVAS	TRACE	NK	4	3	*	1	8	17	13	15	19	22	12	6
CHANGUINOLA INTL	TRACE	PH	17	14	15	17	18	18	21	18	14	16	18	207
DAVID	TRACE	PH	3	1	2	7	19	20	19	19	22	23	20	164
HOWARD AFB	1MM	PH	5	1	2	7	17	18	18	17	17	23	21	14
LA PALMA	1MM	PH	1	1	1	3	13	19	20	19	20	25	18	11
PANAMA CITY	1MM	PH	4	2	1	3	17	17	18	18	16	19	21	14
RIO HATO	TRACE	PH	2	1	1	4	13	16	15	14	13	20	19	128
SANTIAGO	1MM	PH	*	*	*	2	13	14	13	13	15	19	16	6
TOCUMEN	TRACE	PH	6	4	2	5	18	19	20	18	21	22	15	167

AN * INDICATES AN OCCURRENCE OF LESS THAN 1 DAY

TABLE B-3 Mean Monthly Temperatures

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
BELIZE	BZ	74	76	78	80	81	81	82	81	80	76	75	79	
ALAJUELA	CS	71	72	73	74	73	73	72	72	72	71	71	72	
ALTO DE OCHOMOGO	CS	66	66	68	68	66	68	68	67	67	66	66	67	
ARGENTINA GRECIA	CS	77	75	75	76	75	74	75	75	75	76	75	75	
ATENAS	CS	74	75	77	77	77	75	75	75	74	73	73	73	
AVANCE	CS	61	63	64	64	64	64	63	63	64	63	62	63	
BUENVISTA	CS	65	65	67	68	68	68	68	67	67	66	66	67	
CAIRO	CS	74	74	75	75	75	77	76	76	75	73	72	75	
CANAS	CS	82	84	84	84	83	82	82	82	81	81	80	82	
CIUDAD QUESADA	CS	71	72	78	79	75	74	73	74	75	74	73	72	
EL COCO	CS	72	73	75	75	74	73	72	73	72	72	72	73	
EL GUARCO	CS	62	64	64	66	68	66	66	67	67	66	65	65	
ESPARTA	CS	79	81	84	84	80	79	78	78	78	78	78	78	
FILADELFIA	CS	83	83	84	85	84	83	82	83	82	83	83	83	
GOLFITO	CS	83	84	84	84	83	82	82	82	82	82	82	82	
GRECIA	CS	71	73	74	74	74	73	73	73	73	72	72	73	
JUAN VIVAS	CS	68	67	68	69	72	71	69	72	71	69	68	70	
LIBERIA	CS	81	80	82	85	83	81	82	82	81	80	80	81	
LIMON	CS	76	76	77	78	80	78	74	78	78	78	76	77	
LOLA (LA)	CS	75	75	76	77	79	79	78	78	79	78	77	77	
NICOYA	CS	79	81	83	84	82	82	81	82	81	79	79	81	
OROTINA	CS	81	82	83	83	81	78	78	79	78	78	79	80	
PACAYAS	CS	60	61	61	64	63	64	64	64	65	63	62	63	
PALMARES	CS	70	71	72	73	73	73	73	73	73	72	71	72	
QUEBRADA GRANDE	CS	73	75	77	78	77	75	75	75	75	75	73	75	
SAN ISIDRO GENERAL	CS	72	73	74	75	74	74	73	73	73	72	72	73	
SAN ISIDRO CORONA	CS	63	63	65	66	67	68	66	67	68	67	66	66	
SAN JOAQUIN FLORES	CS	71	72	73	75	74	73	73	73	73	72	72	73	
SAN JOSE	CS	67	67	69	71	70	69	70	70	70	69	68	70	
SAN MIGUEL BARRanca	CS	80	82	84	84	80	78	77	77	77	77	76	79	
SAN RAMON	CS	69	69	70	71	72	72	71	71	70	70	69	70	
SAN VITO DE LA JAB	CS	74	76	77	76	75	74	73	73	73	71	73	74	
SANTA ANA	CS	73	74	75	76	75	73	73	73	72	72	72	73	
SANTA CRUZ	CS	80	82	84	86	83	81	80	80	80	79	79	81	
SANTORIO DURAN	CS	58	58	59	60	60	60	60	60	60	59	59	59	
TAPANTI	CS	64	66	67	68	71	70	69	69	69	68	67	68	
TILARAN	CS	74	74	75	77	76	75	76	76	76	75	75	75	
TURRIALBA	CS	70	70	72	73	73	75	74	74	74	73	72	71	
TURRUCARES	CS	78	80	80	80	79	77	77	78	77	76	77	78	
ZARCERO	CS	64	65	66	67	66	66	66	66	65	65	65	64	
ACAJUTLA	ES	80	80	83	84	84	82	82	82	80	79	80	81	
LOS ANDES	ES	58	59	62	64	63	62	63	62	63	62	60	59	
SAN ANDRES	ES	75	75	77	78	78	77	78	77	77	76	75	76	
SAN MIGUEL	ES	79	80	82	84	83	82	80	81	80	77	78	80	
SAN SALVADOR	ES	72	73	75	76	76	74	75	75	74	74	73	73	
SANTA TECLA	ES	68	70	71	72	72	74	72	73	71	70	69	68	
ACULTINGO	GU	65	65	66	66	67	67	67	67	67	66	66	66	
AMATITLAN	GU	73	76	77	78	78	77	77	77	77	76	75	74	
ANTIGUA	GU	60	63	65	67	67	67	67	67	67	66	64	65	
BELIZ	GU	70	70	71	72	73	72	72	72	71	70	71	71	
BUENA VISTA	GU	77	80	80	79	77	77	77	77	77	78	78	78	
CASTANEDA	GU	71	74	78	79	79	77	76	75	75	74	72	76	
CERRO REDONDO	GU	69	71	72	73	73	73	72	73	73	70	69	72	
CHIQUIMULA	GU	74	75	80	82	83	81	80	80	79	78	75	74	

TABLE B-3, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
CHOCOLA	74	74	75	76	77	76	76	76	76	76	75	76	76
CONCEPCION	78	79	80	80	80	79	79	78	78	77	78	76	76
CREEK	74	75	79	80	83	83	81	82	82	80	76	75	79
CUILLAPA	74	75	76	78	77	77	77	75	75	74	73	76	73
DOLORES	71	71	72	72	73	73	74	73	74	73	73	74	73
EL PORVENIR	71	72	77	80	81	79	77	78	76	75	71	76	76
ENTRE RIOS	78	79	80	81	81	80	80	79	78	77	78	77	79
ESCOBILLO	77	78	82	81	82	81	81	81	81	81	79	77	80
FLORENCIA	60	61	64	65	64	63	62	63	62	61	61	60	62
FLORES	74	74	75	75	78	83	85	81	82	81	77	73	78
GUATEMALA CITY	64	65	68	70	70	68	68	68	68	66	64	64	67
HUENUETENANGO	58	60	64	65	65	64	54	64	63	63	63	58	62
JALALTE	70	72	75	78	78	77	75	75	76	74	73	71	74
LA GLORIA	77	78	79	78	78	77	78	77	77	76	77	77	77
LA VIRGEN	78	78	78	79	78	78	78	78	77	76	76	76	78
LABOR OVALLE	50	52	54	57	58	58	57	57	57	56	54	52	55
LAS DELICIAS	77	77	77	77	77	78	79	77	77	77	75	76	77
LAS VINAS	71	72	73	75	76	75	76	75	76	74	73	72	73
LOS ALPES	64	68	69	71	72	72	72	72	72	73	70	67	69
LOS TARRALES	72	72	74	74	74	73	74	74	74	73	72	72	73
JISIAMA	73	74	75	76	76	76	77	77	77	77	76	74	75
NACCA	64	65	68	71	71	70	69	69	69	68	68	65	66
NOKA	72	72	74	74	75	74	74	74	74	73	73	74	74
MONTE BLANCO	71	69	72	76	77	75	74	76	72	72	71	73	73
KONTELIMAR	75	75	73	78	77	77	76	77	77	76	75	75	76
MORELIA	75	75	75	76	76	76	75	73	73	73	75	74	75
MUNDO NUEVO	74	74	76	76	77	77	74	75	75	74	73	72	75
NARANJO	70	70	70	71	71	70	71	71	70	70	70	70	70
PALO GORDO	80	81	82	82	81	80	80	80	80	80	81	80	81
PAHOJILA	67	67	67	67	66	67	67	67	64	64	64	64	66
PATZU	71	71	72	72	72	72	71	71	72	71	71	71	71
PAWNEE PLAYITAS	73	75	79	82	82	82	81	81	81	81	79	76	79
PENA PLATA	73	75	76	78	77	76	76	75	74	74	73	73	75
PUERTO BARRIOS	78	78	79	83	85	86	86	85	85	83	80	79	83
QUEZALTENANGO	51	52	55	61	64	63	62	61	61	60	60	57	58
QUIRIGUA	74	75	79	82	83	82	83	82	82	82	80	76	79
RETANA	61	61	62	64	65	65	64	64	64	64	64	61	63
SAN JOSE	79	80	82	84	84	83	83	83	82	81	81	80	82
SAN JUAN	75	75	76	78	78	78	78	78	77	77	76	72	74
SAN LUIS MALACATAN	81	80	81	81	81	80	80	80	80	80	81	79	80
SANDRALES OSUNA	74	74	77	80	80	79	79	79	77	77	75	74	77
SANRAFAEL PANAN	75	78	78	78	81	79	80	79	79	77	77	76	73
SANTA CRUZ QUIXAYA	71	73	74	74	74	74	72	73	73	71	72	72	73
SANTA CECILIA	68	68	70	71	72	71	71	71	71	70	69	68	70
SANTA ELISA	75	77	78	79	79	78	78	78	77	77	76	75	77
SANTA MARGARITA	74	74	74	74	74	73	72	73	72	72	73	73	73
SANTA TERESA	72	73	75	75	75	75	75	74	74	75	74	73	74
SANTO TOMAS	70	71	72	72	71	72	71	72	72	70	70	70	71
SEPAQUITTE	63	64	68	69	70	71	70	71	70	70	68	65	68
TRECE AGUAS	69	70	72	75	76	76	75	75	75	73	71	71	73
WESTFALIA	70	72	72	78	77	75	75	75	74	73	70	70	73
ZACAPA	79	81	83	85	87	82	82	82	82	80	79	77	81
AMPALA	84	84	86	86	85	83	83	84	82	82	82	83	84
CATACAMAS	72	74	77	79	79	78	78	78	77	77	76	74	76
CHOLUTECA	83	83	86	86	85	81	83	81	80	81	80	81	83
COMAYAGUA	71	73	76	78	80	78	78	78	79	77	77	75	76

TABLE B-3, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
ELZAMOANO	HO	69	70	72	74	75	73	72	73	73	72	70	69	72
GUANAJA	HO	78	78	80	82	80	83	83	84	81	80	78	81	81
LA CECIBA	HO	75	75	78	79	80	81	81	82	82	79	77	76	78
LA ESPERANZA	HO	59	60	63	67	65	65	66	65	66	66	62	58	64
LA MESA	HO	73	74	77	79	81	81	80	80	80	78	75	75	78
NYO OCOTEPEQUE	HO	72	74	77	80	78	77	76	77	76	75	73	72	76
PUERTO LEMPIRA	HO	77	77	79	81	82	82	81	81	81	80	79	78	80
SAN PEDRO SULA	HO	74	75	79	81	82	82	81	82	82	82	78	76	79
SANTA ROSA DE COPAN	HO	63	64	68	71	71	71	70	70	70	68	65	63	68
TEGUCIGALPA	HO	67	69	71	74	74	74	73	73	73	71	69	68	71
TELA	HO	74	75	77	79	80	81	80	80	81	79	76	74	78
YORO	HO	72	74	78	79	80	79	77	77	75	74	74	72	76
BLUEFIELDS	NK	78	79	83	84	80	79	77	79	79	80	78	77	80
CHINAMOGA	NK	74	75	78	80	80	78	79	79	79	78	76	74	77
JEBACO	NK	72	73	75	77	77	74	75	75	75	74	73	72	74
JUIGALPA	NK	78	80	81	82	82	80	78	79	78	79	78	77	80
LAS MERCEDES	NK	79	80	82	84	84	80	80	80	80	80	79	78	81
LAS ROBLES	NK	62	64	65	66	68	68	68	67	68	68	65	64	66
MANAGUA	NK	79	81	84	85	85	81	80	81	80	80	79	79	81
PUERTO CABEZES	NK	77	79	79	82	81	82	82	81	81	79	78	78	80
ALBROOK AFB	PH	79	82	82	84	81	80	81	81	81	80	80	81	81
ALTO LING	PH	65	66	68	69	70	69	71	68	69	69	68	68	68
BALBOA	PH	80	81	82	82	81	80	80	80	80	80	80	80	80
CHANGUINOLA	PH	79	78	80	80	81	82	80	81	81	81	80	79	80
CRISTOBAL	PH	80	80	81	81	81	81	81	81	80	81	80	80	81
GATUN	PH	80	80	81	82	81	81	81	81	81	82	82	80	81
HOWARD AFB	PH	81	82	83	83	82	81	81	81	80	80	80	81	81
HADDEN DAM	PH	76	79	80	81	81	80	80	79	79	79	78	79	78
PUERTO ARMUELLES	PH	78	79	80	80	79	78	78	78	78	77	77	78	78

TABLE B-4 Maximum Temperatures

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	90	93	98	99	97	97	95	96	97	95	95	93
LIMON	CS	94	95	99	102	100	102	91	91	93	95	97	95
NICOYA	CS	98	102	100	100	99	99	95	97	99	93	93	97
PUNTARENAS	CS	107	109	108	102	102	97	100	99	94	95	104	100
SAN JOSE	CS	90	91	96	99	100	91	93	97	97	91	88	91
ACAJUTLA	ES	97	98	99	99	102	95	95	98	102	97	95	97
SAN SALVADOR	ES	101	103	105	104	103	98	98	98	99	101	102	101
SANTA ANA	ES	92	96	99	97	96	93	91	92	90	91	91	92
COBAN	GU	82	86	86	93	84	83	80	81	82	80	82	81
FINCA DOLORES	GU	84	84	85	88	85	85	84	86	85	86	84	84
FLORES	GU	91	95	100	102	104	98	97	95	97	96	95	92
GUATEMALA CITY	GU	86	89	92	91	90	89	83	88	88	84	86	84
HUEHUETENANGO	GU	88	91	93	91	90	91	91	88	90	81	82	82
JALUTE	GU	86	91	95	97	99	97	95	91	95	91	90	86
LOS ALPES	GU	77	88	90	90	86	84	82	82	82	81	75	75
MONTELIMAR	GU	88	91	93	93	93	91	91	91	90	90	86	86
PUERTO BARRIOS	GU	97	100	109	110	108	107	102	100	104	100	98	96
SAN JOSE	GU	93	96	99	100	99	96	97	98	98	98	98	98
SANTA MARGARITA	GU	92	92	92	91	91	91	90	93	90	90	91	91
WESTFALIA	GU	86	91	99	100	97	95	97	91	91	91	90	90
AMPALA	HO	98	99	103	101	104	97	100	100	99	97	97	96
CATACAMAS	HO	97	97	100	103	104	97	96	100	95	102	93	90
CHOLUTECA	HO	100	104	106	105	106	102	99	102	102	97	102	102
GUANAJA	HO	90	95	93	95	95	96	94	94	95	91	90	90
ISLAS DEL CISNE	HO	88	87	89	90	92	92	88	93	92	88	88	88
PUERTO LEMPIRA	HO	90	95	95	95	97	94	102	96	93	95	90	93
SAN PEDRO SULA	HO	99	102	104	106	106	104	100	99	99	99	99	100
SANTA ROSA DE COPAN	HO	89	93	93	94	95	90	88	85	85	84	85	83
TEGUCIGALPA	HO	93	99	98	96	97	99	93	97	95	97	93	95
TELA	HO	90	95	97	99	95	95	93	97	95	95	97	95
BLUEFIELDS	NK	90	90	91	94	94	94	93	97	93	94	93	93
MANAGUA	NK	95	96	100	103	102	96	94	96	98	97	96	94
PUERTO CABEZAS	NK	92	91	93	94	97	93	91	93	97	97	94	91
CHANGUINOLA INTL	PH	96	92	92	93	94	93	93	93	94	94	93	92
CRISTOBAL	PH	88	92	92	94	95	93	91	93	94	95	92	90
DAVID	PH	97	99	99	101	97	93	93	95	97	99	93	93
HOWARD AFB	PH	94	95	97	99	96	95	95	93	94	95	91	94
PUERTO ARMUELLES	PH	93	93	96	93	93	91	90	90	91	90	90	90
RIO HATO	PH	97	97	97	97	95	95	95	97	95	93	97	97

TABLE B-5 Minimum Temperatures

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	50	49	50	55	57	62	63	61	60	58	52	46
SAN JOSE	CS	43	44	47	49	52	54	53	54	54	53	51	44
SAN SALVADOR	ES	45	49	45	54	58	56	58	60	53	54	49	47
SANTA ANA	ES	52	46	53	55	58	55	59	60	59	55	55	50
COBAN	GU	37	36	39	43	42	51	48	46	52	49	43	33
GUATEMALA CITY	GU	42	41	45	47	49	54	50	53	52	46	45	41
HUEHUETENANGO	GU	25	28	32	35	41	45	44	39	41	41	37	26
JALUTE	GU	50	50	54	59	59	64	63	61	61	59	57	55
LOS ALPES	GU	50	54	52	55	59	61	61	61	61	57	54	52
MONTELIMAR	GU	61	61	61	64	64	63	64	61	64	63	63	63
PUERTO BARRIOS	GU	57	55	59	66	68	72	74	75	72	66	62	58
SAN JOSE	GU	56	64	65	68	74	74	72	72	73	71	66	60
SANTA MARGARITA	GU	52	54	55	57	57	57	57	57	54	57	55	50
WESTFALIA	GU	52	54	55	59	59	63	61	61	59	54	54	54
AMATLAN	HO	65	69	70	66	66	66	68	68	65	67	68	68
CATACAMAS	HO	39	48	49	54	52	52	53	56	59	54	50	46
ISLAS DEL CISNE	HO	64	66	67	68	68	70	70	69	70	70	66	64
SAN PEDRO SULA	HO	51	47	50	55	50	57	66	63	65	59	55	51
SANTA ROSA DE COPAN	HO	39	38	37	42	40	47	52	54	55	48	44	40
TEGUCIGALPA	HO	39	43	46	48	49	56	55	54	55	52	48	47
TELA	HO	57	53	54	63	50	64	62	66	67	62	61	54
BLUEFIELDS	NK	60	61	62	63	67	67	70	68	66	64	64	62
MANAGUA	NK	60	61	62	66	63	68	69	68	67	67	64	60
PUERTO CABEZAS	NK	59	61	64	64	58	58	58	64	65	67	65	61
CHANGUINOLA INTL	PH	62	62	64	68	64	68	68	68	68	68	62	65
CRISTOBAL	PH	69	69	67	72	71	68	70	70	70	70	69	66
HOWARD AFB	PH	64	66	68	66	69	69	70	68	69	69	68	66
PUERTO ARMUELLES	PH	60	63	65	67	66	67	66	67	67	68	64	65
RIO HATO	PH	66	68	66	68	70	68	66	66	68	68	66	66

TABLE B-6 Days with Temperatures \geq 90°F

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
BELIZE INTL	BZ	*	4	12	14	11	11	7	9	11	7	7	4	97
LIBERIA	CS	18	21	26	26	22	9	9	7	5	7	13	168	
LIMON	CS	7	8	15	21	17	19	1	4	7	10	7	117	
NICoya	CS	14	22	17	17	15	14	7	9	12	4	4	145	
PUNTARENAS	CS	29	33	31	21	21	11	15	12	5	7	21	221	
SAN JOSE	CS	*	1	10	15	17	1	4	9	9	1	0	1	68
ACAJUTLA	ES	12	14	15	15	21	7	7	11	16	9	11	145	
SAN SALVADOR	ES	19	22	26	24	22	14	10	10	11	13	15	13	199
FLORES	GU	1	7	15	19	22	12	11	7	11	9	7	3	124
GUATEMALA CITY	GU	0	0	3	1	*	0	0	0	0	0	0	0	0
HUEHUETENANGO	GU	0	1	5	1	*	1	1	0	*	0	0	0	9
PUERTO BARRIOS	GU	11	15	30	31	28	27	19	15	22	15	12	9	234
SAN JOSE	GU	5	10	15	17	15	9	10	11	11	11	12	12	136
CATACAHAS	HO	12	12	17	22	24	11	9	14	7	16	4	0	148
CHOLUTECA	HO	23	25	27	21	18	13	17	19	10	9	15	21	218
ISLAS DEL CISNE	HO	0	0	0	*	1	2	6	2	2	1	0	0	14
PUERTO LEMPIRA	HO	*	7	7	7	7	11	6	19	9	4	*	4	81
SAN PEDRO SULA	HO	6	10	24	28	28	22	18	16	13	11	9	7	193
TEGUCIGALPA	HO	1	1	3	2	3	1	*	1	1	1	1	1	16
TELA	HO	*	6	8	14	12	7	4	11	7	7	7	7	94
BLUEFIELDS	NK	*	1	7	7	7	6	4	9	4	5	4	4	51
CHINANDEGA	NK	11	23	29	27	19	12	17	17	6	6	3	15	187
JUIGALPA	NK	2	5	10	14	14	12	1	2	4	1	1	0	56
MANAGUA	NK	8	10	17	22	21	9	6	6	11	9	9	6	136
PUERTO CABEZAS	NK	3	1	5	7	9	5	1	5	9	8	5	1	59
DAVID	PM	12	15	15	19	12	4	4	7	9	12	4	4	117
HOWARD AFB	PM	7	11	19	17	8	4	5	3	2	1	1	3	82
TOCUMEN	PH	8	13	14	13	6	5	7	5	4	2	3	6	86

NOTE: FOR MOST OF THESE STATIONS THE DATA WERE ESTIMATED BASED ON THE EXTREME TEMPERATURE DATA CONTAINED IN TABLE 4.

AN * INDICATES AN OCCURRENCE OF LESS THAN .5 DAYS

TABLE B-7 Mean Monthly Relative Humidity

		0000Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL		BZ	84	79	78	78	77	80	78	83	87	85	84	
LIBERIA	CS	61	54	56	57	77	80	79	81	87	87	79	71	
LIMON	CS	86	84	82	81	84	85	86	83	86	87	90	93	98
NICoya	CS	63	59	57	62	78	84	81	85	90	90	82	72	
PUNTARENAS	CS	75	72	74	76	83	88	87	88	90	90	88	83	
SAN JOSE	CS	70	66	67	73	87	89	83	88	92	93	87	76	
ACAJUTLA	ES	69	68	71	72	75	76	74	76	81	80	73	70	
SAN SALVADOR	ES	62	60	67	70	79	83	80	82	86	84	77	78	
SANTA ANA	ES	57	52	55	58	71	78	72	77	83	80	69	66	
FLORES	GU	82	72	61	55	58	77	80	82	82	86	86	86	
GUATEMALA CITY	GU	66	62	66	67	74	79	72	77	83	81	75	70	
HUEHUETENANGO	GU	47	44	42	46	57	74	64	68	79	77	68	58	
POPTUN	GU	82	73	64	63	69	72	75	74	84	88	86	83	
PUERTO BARRIOS	GU	81	78	76	75	76	78	79	78	80	83	84	85	
RETALHULEU	GU	60	58	61	68	79	84	82	84	89	88	79	67	
SAN JOSE	GU	69	67	69	70	75	79	77	79	83	82	78	74	
CATACAMAS	HO	70	61	55	53	57	72	75	74	77	80	78	76	
CHOLUTECA	HO	51	48	52	54	68	78	68	73	82	82	67	55	
GUANAJA	HO	82	83	70	71	76	86	83	80	84	83	84	82	
ISLAS DEL CISNE	HO	77	75	77	75	78	77	78	78	80	81	80	76	
LA CEIBA	HO	83	83	71	73	69	81	76	79	80	86	84	83	
PUERTO LEMPIRA	HO	84	82	80	74	76	82	78	82	88	86	87	81	
SAN PEDRO SULA	HO	83	78	73	75	72	78	76	77	75	81	83	86	
TEGUCIGALPA	HO	56	49	42	46	56	64	58	60	67	70	67	65	
TEL A	HO	80	78	75	72	72	75	73	73	74	81	85	84	
BLUEFIELDS	NK	83	83	80	79	82	86	84	86	85	87	88	85	
CHINANDEGA	NK	55	53	57	57	69	76	68	76	80	82	78	66	
JUIGALPA	NK	64	58	55	52	63	76	76	78	81	82	78	71	
MANAGUA	NK	61	54	54	52	60	77	76	78	82	83	78	71	
PUERTO CABEZAS	NK	79	76	77	76	81	83	81	83	82	84	85	82	
RIVAS	NK	71	70	66	65	72	83	81	81	81	84	83	79	
DAVID	PH	68	62	68	74	84	84	85	86	88	89	89	80	
HOWARD AFB	PH	74	69	67	70	79	83	82	83	84	85	84	79	
PANAMA CITY	PH	71	67	70	77	84	87	87	84	85	87	86	82	
SANTIAGO	PH	65	60	64	67	85	86	85	87	86	91	90	77	
TOCUMEN	PH	71	67	66	71	83	87	85	87	88	92	90	81	

		0600Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL		BZ	94	93	90	90	88	86	88	91	94	93	95	
SAN JOSE	CS	77	76	76	79	89	91	88	88	92	93	87	81	
ACAJUTLA	ES	75	76	80	79	85	88	87	89	90	93	93	86	
SAN SALVADOR	ES	80	76	80	82	89	93	92	93	93	93	93	83	

TABLE 8-7, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GUATEMALA CITY	GU	87	86	86	86	89	92	90	92	93	91	89	88
HUEHUETENANGO	GU	88	84	84	84	89	94	93	94	95	92	92	92
PUERTO BARRIOS	GU	95	93	92	92	89	94	94	94	93	94	92	95
SAN JOSE	GU	93	88	88	88	93	95	95	94	96	96	94	93
CATACAMAS	HO	84	77	74	74	79	85	83	88	88	89	85	86
CHOLUTECA	HO	66	65	70	74	85	86	82	84	94	87	80	71
ISLAS DEL CISNE	HO	77	76	79	78	80	80	81	82	83	82	80	77
SAN PEDRO SULA	HO	94	92	91	87	87	91	88	89	91	92	93	94
TEGUCIGALPA	HO	79	73	68	69	77	83	79	82	85	83	83	84
TEL A	HO	90	91	91	85	85	89	87	89	87	92	92	92
MANAGUA	NK	82	77	74	72	80	89	88	91	91	93	91	87
HOWARD AFB	PH	81	78	78	79	84	86	85	87	87	87	87	83
TOCUMEN	PH	85	82	81	84	91	94	93	94	94	95	95	92
 1200Z													
BELIZE INTL	82	96	95	92	91	90	91	90	93	95	95	95	95
LIMON	CS	93	92	94	93	94	94	94	95	95	93	94	94
NICARAYA	CS	83	77	78	77	94	96	93	96	98	97	93	88
PUNTARENAS	CS	89	86	85	86	92	95	95	97	96	97	96	93
SAN JOSE	CS	78	77	78	79	87	87	86	87	90	90	86	80
ACAJUTLA	ES	72	70	77	77	85	89	87	89	89	87	77	76
SAN SALVADOR	ES	85	83	86	85	92	95	92	95	93	88	86	86
SANTA ANA	ES	81	81	83	84	91	92	91	91	94	92	85	84
FLORES	GU	94	96	95	94	93	95	95	96	96	96	96	95
GUATEMALA CITY	GU	90	90	91	91	91	92	93	93	93	92	90	91
HUEHUETENANGO	GU	95	95	94	95	95	97	97	97	97	96	97	96
POPTUN	GU	94	95	93	90	90	93	95	97	96	97	98	97
PUERTO BARRIOS	GU	94	95	94	94	94	94	95	94	94	95	93	94
RETALHULEU	GU	82	85	84	89	91	90	90	91	92	89	86	86
SAN JOSE	GU	95	93	93	93	95	95	96	97	97	96	94	94
CATACAMAS	HO	89	83	80	82	84	88	87	89	91	91	89	87
CHOLUTECA	HO	70	68	68	72	90	86	82	84	92	87	80	72
ISLAS DEL CISNE	HO	78	76	78	77	79	80	81	81	82	82	80	77
SAN PEDRO SULA	HO	96	96	94	81	90	93	93	94	93	95	97	96
TEGUCIGALPA	HO	85	82	89	80	84	87	86	87	88	89	86	86
TEL A	HO	92	95	86	93	89	91	95	90	89	94	95	92
BLUEFIELDS	NK	86	86	85	81	85	87	88	88	91	91	91	89
MANAGUA	NK	87	83	83	82	88	93	90	93	94	95	93	90
PUERTO CABEZAS	NK	88	88	85	85	87	87	88	91	92	96	94	91
RIVAS	NK	82	81	81	82	88	91	88	89	91	91	89	85

TABLE B-7, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DAVID	PH	87	84	84	88	94	97	97	97	98	97	94	
FORT SHERMAN	PH	85	82	83	86	91	93	94	93	95	95	91	
HOWARD AFB	PH	82	79	80	84	87	86	87	88	88	87	84	
PANAMA CITY	PH	86	84	88	87	91	93	95	94	93	95	93	
TOCUMEN	PH	86	86	85.	86	93	95	94	95	95	95	92	
 1800Z													
BELIZE INTL	BZ	72	71	68	67	66	75	72	72	75	76	71	75
LIBERIA	CS	48	45	46	47	60	70	66	68	72	72	67	57
LIMON	CS	74	75	73	73	75	78	78	74	75	77	76	
NICOYA	CS	49	45	41	44	59	68	65	67	71	71	67	58
PUNTARENAS	CS	54	51	53	56	68	73	71	72	74	72	64	
SAN JOSE	CS	51	49	47	49	63	69	64	65	70	71	64	54
ACAJUTLA	ES	59	60	65	64	70	71	69	71	75	70	64	60
SAN SALVADOR	ES	49	46	48	49	62	68	65	68	71	66	59	53
SANTA ANA	ES	48	45	43	44	57	65	61	63	67	63	55	52
FLORES	GU	72	68	60	54	57	66	65	66	69	70	71	72
GUATEMALA CITY	GU	52	47	44	45	52	64	61	63	65	62	59	56
HUEHUETENANGO	GU	40	37	34	35	43	57	55	56	59	59	53	44
POPTUN	GU	71	61	59	56	58	67	65	69	71	77	75	71
PUERTO BARROS	GU	78	77	73	70	72	73	74	76	76	77	78	
RETALHULEU	GU	45	45	46	47	60	63	61	60	65	63	57	50
SAN JOSE	GU	53	51	54	55	66	71	67	69	73	69	63	
CATACAMAS	HO	61	53	49	48	51	65	65	66	63	63	63	
CHOLUTECA	HO	46	45	46	45	60	65	61	62	68	68	55	48
GUANAJA	HO	75	71	63	65	68	71	77	74	73	76	73	
ISLAS DEL CISNE	HO	69	67	68	67	70	72	70	71	73	74	73	70
LA CEIBA	HO	79	74	74	65	69	68	70	73	75	78	75	
PUERTO LEMPIRA	HO	76	72	73	62	68	73	75	80	79	81	81	
SAN PEDRO SULA	HO	74	70	62	62	60	66	66	65	65	73	74	75
TESUCIGALPA	HO	54	48	43	43	47	57	56	55	54	60	60	58
TELA	HO	77	69	67	65	66	67	67	65	68	73	77	74
BLUEFIELDS	NK	80	78	76	73	78	82	83	83	81	82	81	
CHINANDEGA	NK	44	42	41	45	58	65	58	62	67	70	63	53
JUIGALPA	NK	54	53	50	49	54	66	64	65	65	64	60	
MANAGUA	NK	50	45	45	45	54	66	63	65	66	68	60	54
PUERTO CABEZAS	NK	75	74	71	71	73	78	78	77	78	77	76	
RIVAS	NK	67	63	61	60	69	78	76	75	74	77	74	71
DAVID	PM	57	54	58	62	70	73	73	74	76	75	65	
FORT SHERMAN	PM	73	72	69	70	78	81	82	80	77	78	81	79
HOWARD AFB	PM	59	53	52	57	70	74	72	74	75	76	76	69
PANAMA CITY	PM	58	56	63	67	75	80	78	77	75	77	73	71
SANTIAGO	PM	54	50	49	54	69	72	71	70	72	73	74	64
TOCUMEN	PM	57	52	53	58	70	74	71	75	75	77	74	65

TABLE B-8 Days with Thunderstorms

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	ANN
BELIZE INTL.	BZ	0	3	3	3	5	14	10	5	5	0	5	61	
LIBERIA	CS	*	0	1	2	9	6	8	6	9	5	2	* 48	
LIMON	CS	**	0	1	4	9	10	9	10	12	9	1	38	
NICOYA	CS	*	0	1	4	9	8	8	9	10	7	2	* 66	
PUNTARENAS	CS	*	0	2	9	5	10	13	10	10	7	3	57	
SAN JOSE	CS	0	0	5	5	10	13	10	10	5	5	3	69	
ACAJUTLA	ES	1	0	2	5	14	22	17	19	23	19	3	134	
SANTA ANA	ES	0	1	2	7	9	8	12	12	8	2	1	62	
SAN SALVADOR	ES	2	1	5	12	18	15	19	19	17	5	2	117	
FLORES	GU	**	1	1	5	12	13	13	13	13	6	2	1	67
GUATEMALA CITY	GU	**	1	3	8	8	9	6	6	7	4	1	* 51	
HUEHUETENANGO	GU	0	0	5	3	5	16	12	21	12	12	3	1	48
PUERTO BARRIOS	GU	0	1	0	1	2	11	12	14	15	18	14	7	93
RETALHULEU	GU	1	*	0	2	8	10	12	11	13	12	5	1	95
SAN JOSE	GU	*	*	1	1	3	8	9	8	9	9	1	72	
CATACAMAS	HO	*	0	1	3	10	15	13	14	18	8	1	42	
CHOLUTECA	HO	14	8	7	7	8	13	11	11	13	17	14	1	92
ISLAS DEL CISNE	HO	0	1	1	1	2	8	14	13	15	4	1	139	
LA CEIBA	HO	1	*	1	1	1	5	9	8	12	20	6	3	39
PUERTO LEMPIRA	HO	1	1	1	1	3	8	6	4	6	9	5	1	58
SAN PEDRO SULA	HO	1	*	1	1	*	5	10	10	16	6	4	1	42
TEGUCIGALPA	HO	2	1	*	1	*	5	10	10	16	6	2	2	70
TELZA	HO	0	2	1	*	*	5	10	10	16	6	2	2	70
BLUEFIELDS	NK	3	3	2	2	4	6	7	9	9	7	5	3	60
CHINANDEGA	NK	*	0	1	0	6	11	7	10	10	7	2	*	54
JUJIGALPA	NK	0	0	1	1	7	8	7	6	4	1	1	4	43
MANAGUA	NK	*	*	1	1	6	6	6	3	6	9	3	*	44
PUERTO CABEZAS	NK	7	4	*	4	4	12	12	13	11	12	9	7	99
RIVAS	NK	*	*	1	*	4	11	8	13	14	11	5	1	68
CHANGUINAOLA	PH	0	0	0	2	7	7	7	10	10	7	7	2	67
DAVID	PH	0	0	4	9	9	14	16	16	17	15	16	13	517
HOWARD AFB	PH	1	*	*	4	14	16	16	16	17	15	16	13	517
JAQUE	PH	0	0	3	7	9	12	9	12	13	8	12	5	83
LA PALMA	PH	0	0	3	3	13	13	14	13	13	13	13	5	107
PANAMA CITY	PH	0	0	3	5	13	14	16	16	16	12	13	5	104
POVENIR	PH	0	0	3	3	13	13	13	23	27	18	14	7	935
RIO HATO	PH	0	0	3	3	8	12	12	16	14	16	10	5	104
SANTIAGO	PH	0	0	3	5	8	13	8	8	8	8	5	3	64
TOCUMEN	PH	*	*	2	10	10	12	12	12	14	14	6	3	65

NOTE: AN * INDICATES THUNDERSTORMS OCCURRED LESS THAN 5 DAYS A MONTH

CAUTION: REPORTS OF THUNDERSTORMS IN THE DATA ITSELF APPEARED ERRATIC AND SUSPECT AT SOME LOCATIONS

TABLE B-9 Prevailing Wind Direction and Mean Speed, Selected Times

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0000Z	BELIZE INTL	BZ	E	E	E	E	E	E	E	E	E	E	E
	BELIZE INTL	BZ	6	6	7	8	9	9	10	7	6	5	5
LIBERIA	CS	NE	NE	NE	NE	SW	W	E	E	NE	E	E	NE
LIBERIA	CS	15	17	14	19	9	10	9	9	10	8	10	12
LIMON	CS	NE	W	W	W								
LIMON	CS	5	5	6	6	5	5	4	4	4	5	5	5
NICOCYA	CS	NE											
NICOCYA	CS	10	10	9	9	7	7	6	6	5	5	7	8
PUNTARENAS	CS	S	S	S	S	S	SE	E	S	S	SE	S	S
PUNTARENAS	CS	6	6	5	5	5	5	5	5	5	5	5	5
SAN JOSE	CS	E	E	E	E	E	E	E	E	W	E	E	E
SAN JOSE	CS	18	19	17	16	12	8	11	10	8	6	10	16
ACAJUTLA	ES	S	SW	SW	SW	SW	W	W	W	W	W	W	W
ACAJUTLA	ES	4	5	5	5	5	5	5	5	5	5	4	4
SAN SALVADOR	ES	6	8	9	9	9	NW	NW	NW	NW	NW	6	6
SANTA ANA	ES	W	N	W	W	W	3	3	3	2	3	3	3
SANTA ANA	ES	5	5	5	5	5	4	3	3	2	3	3	3
FLORES	GU	E	7	6	7	8	S	S	W	W	W	W	W
GUATEMALA CITY	GU	N	N	S	S	S	9	9	10	8	9	11	12
GUATEMALA CITY	GU	14	13	10	12	8	E	E	E	E	E	SE	E
HUEHUETENANGO	GU	SE	E	E	E	E	10	10	10	9	8	9	8
HUEHUETENANGO	GU	11	11	11	11	11	E	E	E	E	E	NE	N
POPTUN	GU	E	E	E	E	E	10	10	10	9	8	9	8
POPTUN	GU	7	7	7	7	7	7	7	7	7	7	7	7
PUERTO BARRIOS	GU	NE											
PUERTO BARRIOS	GU	6	6	6	6	7	7	7	7	7	7	7	7
RETALHULEU	GU	SW	SW	SW	SW	SW	W	W	W	W	W	W	W
RETALHULEU	GU	5	7	8	7	6	7	7	7	7	7	7	7
SAN JOSE	GU	SW	SW	SW	SW	SW	W	W	W	W	W	W	W
SAN JOSE	GU	6	6	6	7	7	7	7	7	7	7	7	7
CATACAMAS	HO	NE	E	E	E	E	16	13	17	16	13	14	12
CATACAMAS	HO	6	6	6	6	6	W	W	W	W	W	5	6
CHOLUTECA	HO	NE											
CHOLUTECA	HO	10	9	6	6	5	4	4	4	4	3	3	3
GUANAJA	HO	E	E	E	E	E	NE						
GUANAJA	HO	10	14	16	13	17	E	E	E	E	E	E	E
ISLAS DEL CISNE	HO	E	E	E	E	E	18	10	10	10	10	10	10
ISLAS DEL CISNE	HO	9	9	9	9	9	W	W	W	W	W	W	W
LA CEIBA	HO	E	E	E	E	E	NE						
LA CEIBA	HO	5	7	8	8	8	8	8	8	8	8	7	7
PUERTO LEMPIRA	HO	8	8	8	8	8	8	8	8	8	8	7	7
PUERTO LEMPIRA	HO	N	N	N	N	N	N	N	N	N	N	N	N
SAN PEDRO SULA	HO	7	8	11	9	9	9	9	9	9	9	7	7
SAN PEDRO SULA	HO	N	N	N	N	N	N	N	N	N	N	N	N
TEGUCIGALPA	HO	9	11	9	10	8	8	8	8	8	8	8	9
TEGUCIGALPA	HO	E	E	E	E	E	NE	NE	NE	NE	NE	7	6
TELA	HO	6	6	6	6	6	6	6	6	6	6	6	5

TABLE B-9, Cont'd.

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BLUEFIELDS	NK	NE	E	E	E	E	NE	E	E	NE	E	E
BLUEFIELDS	NK	8	8	9	8	7	6	8	7	7	6	7
CHINANDEGA	NK	NE	SW	SW	SW	E	E	SE	SE	SE	SW	NE
CHINANDEGA	NK	7	6	8	7	6	7	7	5	6	4	4
JUIGALPA	NK	N	N	N	N	N	N	N	N	N	N	10
JUIGALPA	NK	8	9	8	9	7	6	7	8	7	5	7
MANAGUA	NK	E	E	E	E	E	E	E	E	E	E	E
MANAGUA	NK	7	8	7	8	8	6	5	5	4	4	5
PUERTO CABEZAS	NK	NE	NE	E	E	E	E	NE	E	NE	N	NE
PUERTO CABEZAS	NK	11	11	11	12	11	11	12	10	9	8	10
RIVAS	NK	E	E	E	E	E	E	E	E	E	E	E
RIVAS	NK	9	9	7	7	5	7	7	6	7	7	8
BOCAS DEL TORO INTL	PM	N	N	N	N	N	N	N	N	N	N	NW
BOCAS DEL TORO INTL	PH	6	7	6	7	6	5	6	5	5	7	6
CHANGUINOLA INTL	PH	N	N	N	N	N	N	N	N	N	N	NW
CHANGUINOLA INTL	PH	5	4	5	5	5	4	4	5	4	3	4
DAVID	PH	SW	NE	SW								
DAVID	PH	8	10	9	8	8	7	6	6	7	7	7
HOWARD AFB	PH	N	N	N	N	NW						
HOWARD AFB	PH	7	7	8	8	6	5	6	6	5	6	6
LA PALMA	PH	N	N	N	N	SW						
LA PALMA	PH	7	7	7	7	7	6	6	6	6	6	6
PANAMA CITY	PH	N	N	N	N	NW						
PANAMA CITY	PH	10	11	11	11	11	8	9	8	8	8	8
PORVENIR	PH	N	N	N	N	NW						
PORVENIR	PH	13	13	12	11	8	7	8	8	9	8	11
RIC HATO	PH	NW										
RIO HATO	PH	13	14	15	15	10	7	9	7	6	7	9
SANTIAGO	PH	N	N	N	N	SW	SW	SW	SW	SW	SW	N
SANTIAGO	PH	11	13	14	12	8	8	7	7	6	7	8
TOCUMEN	PH	NE	NE	NE	NE	NW						
TOCUMEN	PH	9	9	10	9	7	6	7	7	6	8	7
0600Z												
BELIZE INTL	BZ	E	E	E	SE	E	E	E	E	E	E	E
BELIZE INTL	BZ	5	6	5	6	6	7	9	6	7	5	5
SAN JOSE	CS	E	E	E	NE	E						
SAN JOSE	CS	18	18	16	14	8	9	11	9	8	7	14
ACAJUTLA	ES	N	N	N	N	N	N	N	N	N	N	N
ACAJUTLA	ES	5	5	5	4	4	5	5	5	4	4	5
SAN SALVADOR	ES	N	N	N	N	N	N	N	N	N	N	N
SAN SALVADOR	ES	7	5	5	5	4	4	4	4	4	4	6

TABLE B-9, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
GUATEMALA CITY	N	N	N	N	N	N	N	N	N	N	N	N
GUATEMALA CITY	10	10	9	9	7	7	9	8	7	8	9	9
HUEHUETENANGO	SE	E	E	E	SE	E	E	S	SE	S	SE	S
PUERTO BARRIOS	GU	S	5	6	6	6	7	6	5	5	5	4
PUERTO BARRIOS	GU	W	W	E	N	N	E	E	NW	N	W	W
SAN JOSE	GU	6	10	5	6	5	7	6	7	6	10	10
SAN JOSE	GU	N	N	N	N	N	N	N	N	10	10	10
CATACAMAS	HO	6	7	9	5	6	7	6	8	7	4	4
CATACAMAS	HO	4	4	5	6	4	4	5	5	4	3	3
CHOLUTECA	HO	NE										
CHOLUTECA	HO	10	10	8	7	3	6	7	6	5	6	8
ISLAS DEL CISNE	HO	E	E	E	E	E	E	E	E	E	E	E
ISLAS DEL CISNE	HO	9	9	10	10	10	10	9	8	10	8	9
SAN PEDRO SULA	HO	S	N	N	N	N	N	NE	NE	S	S	S
SAN PEDRO SULA	HO	6	4	5	4	5	4	5	5	5	4	4
TEGUCIGALPA	HO	N	N	SH	N	SE	N	NH	NH	NH	NH	NH
TEGUCIGALPA	HO	7	8	6	8	5	5	6	5	4	6	7
TEL A	HO	E	E	E	E	E	E	E	E	S	S	S
TEL A	HO	7	6	6	4	6	5	5	4	5	5	4
MANAGUA	NK	E	E	E	E	E	E	E	SE	E	E	E
MANAGUA	NK	5	4	5	6	5	4	4	3	3	3	3
HOWARD AFB	PH	N	N	N	N	N	NW	N	N	N	N	N
HOWARD AFB	PH	6	6	6	6	4	5	4	4	5	5	5
TOCUMEN	PH	NE	NE	NW	N	N	NE	NW	NW	NW	NW	NW
TOCUMEN	PH	6	7	6	6	5	6	5	5	5	6	5

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1200Z												
BELIZE INTL	BZ	W	E	SE	E	E	E	E	E	E	W	W
BELIZE INTL	BZ	6	5	6	6	6	6	6	6	5	4	5
LIMON	CS	W	W	SW	W	W	W	W	W	W	W	W
LIMON	CS	4	4	4	4	4	4	4	4	4	4	4
NICOYA	CS	NE										
NICOYA	CS	8	8	8	7	8	4	7	7	8	9	8
PUNTARENAS	CS	NE										
PUNTARENAS	CS	5	6	6	5	3	4	3	3	4	5	6
SAN JOSE	CS	E	E	E	NE	NE	NE	NE	NE	NE	E	E
SAN JOSE	CS	17	16	16	15	9	9	11	9	7	10	13
ACAJUTLA	ES	NE	NE	NE	NE	NE	NE	N	N	NE	N	N
ACAJUTLA	ES	5	5	5	5	4	4	5	4	5	4	5
SAN SALVADOR	ES	N	N	N	N	N	N	N	N	N	N	N
SAN SALVADOR	ES	7	7	5	4	3	3	4	4	3	5	6
SANTA ANA	ES	4	4	4	4	4	4	4	4	4	4	4
SANTA ANA	ES	2	2	2	2	1	1	2	2	1	2	2

TABLE B-9, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
FLORES FLORES	N 6	N 6	N 6	S E	S E	S E	S E	E	E	E	E	N 6
GUATEMALA CITY GUATEMALA CITY	GU 9	N 9	S 8	S 6	S 7	S 7	S 7	N N	N N	N N	N N	SE
HUEHUETENANGO HUEHUETENANGO	GU 5	4	4	6	4	5	6	N E	S E	S E	S E	SE
POPTUN POPTUN	GU NE	7	8	7	9	7	9	8	4	5	5	6
PUERTO BARRIOS PUERTO BARRIOS	GU 10	9	9	7	7	6	8	6	7	6	7	10
RETALHULEU RETALHULEU	GU N	N	N	N	N	N	N	N	N	N	N	N
SAN JOSE SAN JOSE	GU 5	5	5	5	5	4	6	5	5	5	5	5
CATACAMAS CATACAMAS	HO HO	5	4	NW	NW	N 3	N 4	NE	NW	NW	NW	NW
CHOLUTECA CHOLUTECA	HO 9	9	9	6	7	4	4	5	4	3	4	7
ISLAS DEL CISNE ISLAS DEL CISNE	HO 9	9	9	11	9	10	10	9	8	8	7	9
SAN PEDRO SULA SAN PEDRO SULA	HO S	S	S	S	S	S	S	S	S	S	S	S
TEGUCIGALPA TEGUCIGALPA	HO 4	N	N	N	N	N	N	N	N	N	N	N
TELA TELA	HO 4	4	4	3	3	3	3	3	3	3	3	3
BLUEFIELDS BLUEFIELDS	NX NK	7	4	E E	E E	E 2	E 2	NE	NW	NW	NW	NW
MANAGUA MANAGUA	NK 5	E 4	E 4	E E	E E	E E	E E	NE	NW	NW	NW	NW
PUERTO CABEZAS PUERTO CABEZAS	NK NW	NW	NW	10	9	11	11	13	9	6	5	6
RIVAS RIVAS	NK 8	6	6	E E	E E	E E	E E	E E	E E	E E	E E	E E
RIVAS RIVAS	NK 10	10	8	9	9	5	7	9	7	5	5	6
BOCAS DEL TORO INTL BOCAS DEL TORO INTL	PH 7	7	6	7	5	7	6	6	6	6	5	6
CHANGUINOLA INTL CHANGUINOLA INTL	PH SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
DAVID DAVID	PH 5	5	4	4	4	4	4	5	3	3	3	4
FORT SHERMAN FORT SHERMAN	PH 8	9	7	7	6	5	5	5	5	5	5	5
HOWARD AFB HOWARD AFB	PH 7	4	4	5	3	3	4	3	3	3	3	4
PANAMA CITY PANAMA CITY	PH 8	7	8	8	7	6	6	6	7	7	6	6
PORVENIR PORVENIR	PH 14	13	13	13	10	9	8	7	9	9	8	14
RIO HATO RIO HATO	PH NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW	NW
SANTIAGO SANTIAGO	PH NE	NE	NE	NE	SW							
TOCUMEN TOCUMEN	PH 9	7	8	7	6	5	5	5	5	5	5	5
TOCUMEN TOCUMEN	PH 6	6	6	6	5	5	5	5	5	5	5	5

TABLE B-9, Cont'd.

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1800Z	BELIZE INTL	BZ	E	E	E	E	E	E	E	E	E	E	NE	
	BELIZE INTL	BZ	9	9	9	11	10	11	10	8	9	9	9	8
LIBERIA	CS	NE	NE	E	E	E	E	E	E	E	E	E	E	
LIBERIA	CS	19	16	18	17	12	11	12	9	9	9	17	17	
LIMON	CS	E	NE	E	NE	N	N	N	NE	N	N	N	NE	
LIMON	CS	7	6	7	8	6	6	6	7	7	7	6	7	
NICOYA	CS	NE												
NICOYA	CS	11	10	10	10	7	6	7	6	6	6	7	9	
PUNTARENAS	CS	S	SW	S	S	S	S	S	S	S	S	S	S	
PUNTARENAS	CS	7	6	5	6	5	6	5	5	5	4	4	4	
SAN JOSE	CS	E	E	E	SW	E								
SAN JOSE	CS	21	21	20	20	11	12	15	13	12	10	14	18	
ACAJUTLA	ES	S	S	S	S	S	S	S	S	S	S	S	S	
ACAJUTLA	ES	7	9	8	8	7	7	6	6	6	6	6	8	
SAN SALVADOR	ES	N	N	N	N	N	N	N	N	N	N	N	N	
SAN SALVADOR	ES	9	10	7	6	5	4	5	5	4	6	9	9	
SANTA ANA	ES	N	N	N	NE	N	N	NE	N	N	N	N	N	
SANTA ANA	ES	5	7	3	3	1	2	5	2	2	3	5	6	
FLORES	GU	N	N	N	N	N	N	N	N	N	N	N	N	
FLORES	GU	6	6	9	6	6	6	6	6	6	6	6	6	
GUATEMALA CITY	GU	N	13	13	11	10	10	11	10	9	11	12	14	
GUATEMALA CITY	GU	13	13	11	11	10	10	10	10	10	11	12	14	
HUEHUETENANGO	GU	SE	E	E	E	E	E	E	E	E	SE	S	S	
HUEHUETENANGO	GU	9	9	9	9	8	7	10	10	10	9	8	8	
POPTUN	GU	E	E	E	E	E	E	E	E	E	E	E	E	
POPTUN	GU	10	10	12	10	8	10	8	8	8	9	7	6	
PUERTO BARRIOS	GU	N	N	N	N	N	N	N	N	N	N	N	N	
PUERTO BARRIOS	GU	8	8	9	10	9	8	8	8	8	7	6	8	
RETALHULEU	GU	SN	SN	S	S	S	S	S	S	S	S	S	S	
RETALHULEU	GU	6	7	6	6	5	5	7	5	5	5	5	5	
SAN JOSE	GU	S	S	S	S	S	S	S	S	S	S	S	S	
SAN JOSE	GU	8	9	10	9	8	8	8	7	7	7	7	8	
CATACAMAS	HO	E	E	E	E	E	E	E	E	E	E	E	E	
CATACAMAS	HO	7	7	8	8	9	10	9	9	9	9	12	12	
CHOLUTECA	HO	N	NE	S	NE	S	NE							
CHOLUTECA	HO	11	11	8	10	8	9	10	9	9	11	11	11	
GUANAJA	HO	E	E	E	E	E	E	E	E	E	E	E	E	
GUANAJA	HO	12	10	14	13	13	13	12	11	11	10	9	11	
ISLAS DEL CISNE	HO	E	E	E	E	E	E	E	E	E	E	E	E	
ISLAS DEL CISNE	HO	11	11	13	13	13	13	12	11	11	10	9	11	
LA CEIBA	HO	N	N	N	N	N	N	N	N	N	N	N	N	
LA CEIBA	HO	6	7	7	7	7	7	7	7	7	7	7	6	
PUERTO LEMPIRA	HO	E	E	E	E	E	E	E	E	E	E	E	E	
PUERTO LEMPIRA	HO	8	8	8	8	8	8	8	8	8	8	8	7	
SAN PEDRO SULA	HO	N	N	N	N	N	N	N	N	N	N	N	N	
SAN PEDRO SULA	HO	3	6	7	7	7	7	7	7	7	6	6	6	
TEGUCIGALPA	HO	N	N	N	N	N	N	N	N	N	N	N	N	
TEGUCIGALPA	HO	10	11	10	11	10	11	10	11	10	11	11	11	
TEL	HO	N	N	N	N	N	N	N	N	N	N	N	N	
TEL	HO	5	6	5	6	5	6	5	6	5	6	6	6	

TABLE B-9, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BLUFFFIELDS	NE	NE	E	E	E	E	E	E	E	E	E	N
CHINANDEGA	NE											
CHINANDEGA	NK	NK	11	10	10	10	7	7	6	6	6	11
JUIGALPA	NK	N	N	N	N	N	N	N	N	N	N	N
JUIGALPA	NK	11	10	9	9	7	6	5	5	5	5	11
HANGUA	NK	E	E	E	E	E	E	E	E	E	E	9
MANAGUA	NK	11	11	10	10	8	7	6	5	5	5	9
PUERTO CABEZAS	NK	NE	E	E	E	E	E	E	E	E	E	7
PUERTO CABEZAS	NK	12	11	11	12	11	12	11	12	12	12	10
RIVAS	NK	E	E	E	E	E	E	E	E	E	E	9
RIVAS	NK	11	12	10	9	7	6	5	4	3	3	10
BOCAS DEL TORO INTL	PH	4	7	7	7	7	7	7	7	7	7	7
BOCAS DEL TORO INTL	PH	N	N	N	N	N	N	N	N	N	N	N
CHANGUINOLA INTL	PH	6	6	6	6	7	7	6	6	6	6	6
CHANGUINOLA INTL	PH	S	S	S	S	S	S	S	S	S	S	S
DAVID	PH	10	13	11	10	9	8	8	8	8	8	8
DAVID	PH	NE										
FORT SHERMAN	PH	8	7	7	7	6	6	6	6	6	6	6
HOWARD AFB	PH	N	N	N	N	N	N	N	N	N	N	N
HOWARD AFB	PH	10	11	11	10	10	7	6	6	6	6	6
JAQUE	PH	SU										
JAQUE	PH	7	7	6	6	6	7	6	7	6	7	6
LA PALMA	PH	N	N	N	N	N	N	N	N	N	N	N
PANAMA CITY	PH	N	N	N	N	N	N	N	N	N	N	N
PANAMA CITY	PH	11	12	11	10	9	8	8	8	8	8	8
PORVENIR	PH	N	N	N	N	N	N	N	N	N	N	N
PORVENIR	PH	14	15	12	11	11	8	8	8	8	8	12
RIO HATO	PH	NW	NW	NW	NW	NW	SE	SE	SE	SE	SE	SE
RIO HATO	PH	13	14	12	10	8	8	8	8	8	8	8
SANTIAGO	PH	N	N	N	N	N	SU	SU	SU	SU	SU	SU
SANTIAGO	PH	12	11	12	11	11	8	7	7	7	7	7
TOCUMEN	PH	NE										
TOCUMEN	PH	23	23	23	23	23	23	23	23	23	23	23

TABLE B-10 Calm Winds: Percent Frequency of Occurrence, Selected Times

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0000Z	BELIZE INTL	82	26	9	8	12	12	7	43	17	31	36	30
LIBERIA	CS	19	7	13	20	57	70	41	73	87	82	72	48
LIMON	CS	27	23	26	31	32	21	29	91	42	36	38	
NICOCYA	CS	34	11	17	23	67	89	79	84	94	93	81	52
PUNTARENAS	CS	52	37	46	39	54	51	64	58	54	62	52	54
SAN JOSE	CS	4	4	12	15	21	25	12	21	20	27	20	5
ACAJUTLA	ES	15	9	22	8	13	18	25	13	12	11	11	18
SAN SALVADOR	ES	12	0	*	5	6	11	14	13	11	7	9	
SANTA ANA	ES	24	12	8	9	30	39	42	45	50	42	32	28
FLORES	GU	76	68	49	41	56	70	75	77	76	73	77	77
GUATEMALA CITY	GU	4	*	5	9	9	16	16	21	21	16	8	6
HUEHUETENANGO	GU	18	23	19	24	45	53	24	38	63	69	50	36
POPTUN	GU	85	60	48	42	66	50	52	69	85	92	96	90
PUERTO BARRIOS	GU	46	40	24	20	32	26	24	33	58	63	62	57
RETALHULEU	GU	25	13	19	46	40	47	46	51	63	66	43	
SAN JOSE	GU	53	31	21	27	28	36	25	34	37	55	70	70
CATACAMAS	HO	53	20	20	29	19	30	24	42	43	41	13	99
CHOLUTECA	HO	8	5	6	14	11	21	19	21	26	29	20	13
GUANAJA	HO	31	11	*	14	17	21	*	5	9	32	46	
ISLAS DEL CISNE	HO	0	0	0	0	0	0	0	0	*	2	2	4
LA CEIBA	HO	25	22	26	18	15	13	16	10	27	28	36	44
PUERTO LEMPIRA	HO	8	6	10	20	9	13	15	9	13	15	13	13
SAN PEDRO SULA	HO	21	17	16	16	11	21	15	22	20	26	29	24
TEGUCIGALPA	HO	6	0	0	7	5	7	6	8	9	10	6	8
TELIA	HO	27	21	12	24	12	18	20	10	22	33	44	32
BLUEFIELDS	NK	19	5	4	4	7	26	10	15	28	21	23	15
CHINANDEGA	NK	22	15	6	17	11	24	27	34	43	52	64	
JUIGALPA	NK	5	4	11	0	16	16	17	31	31	34	16	
MANAGUA	NK	5	6	8	9	16	28	16	28	34	43	41	33
PUERTO CABEZAS	NK	11	6	0	0	*	8	6	10	10	14	6	9
RIVAS	NK	21	17	20	30	51	57	31	48	61	67	52	36
BOCAS DEL TORO INTL	PH	13	20	17	17	21	20	21	23	37	40	23	26
CHANGUINOLA INTL	PH	39	24	16	26	31	30	29	31	45	47	48	43
DAVID	PH	22	9	18	23	24	33	36	31	38	42	29	32
HOWARD AFB	PH	6	3	6	12	27	21	19	26	33	35	28	42
LA PALMA	PH	23	11	12	27	26	27	25	22	31	27	26	29
PANAMA CITY	PH	10	11	8	8	23	27	17	24	26	36	28	19
PROVENIR	PH	0	4	5	4	6	12	6	6	5	7	8	6
RIO HATO	PH	39	8	7	9	27	30	26	32	39	44	42	26
SANTIAGO	PH	7	10	13	16	27	23	27	35	30	23	26	
TOCUMEN	PH	25	14	11	16	37	40	34	38	42	43	47	32

0600Z

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

BELIZE INTL

0000Z

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

SAN JOSE

0000Z

JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC

TABLE B-10, Cont'd.

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ACAJUTLA SAN SALVADOR	ES	9	10	10	11	9	16	10	9	9	13	6	5
	ES	26	25	43	28	22	23	24	21	27	24	20	18
GUATEMALA CITY	GU	14	17	29	22	40	32	21	21	37	17	11	12
HUEHUETENANGO	GU	42	50	39	40	64	69	52	62	83	83	70	53
PUERTO BARRIOS	GU	51	45	44	33	46	43	38	46	58	62	60	62
SAN JOSE	GU	64	60	60	49	50	58	55	58	57	73	77	80
CATACAMAS	HO	54	29	28	26	32	53	48	49	51	35	49	
CHOLUTECA	HO	35	33	55	50	57	80	33	39	56	46	36	27
ISLAS DEL CISNE	HO	0	*	*	*	0	0	0	0	*	2	4	2
SAN PEDRO SULA	HO	68	65	61	64	41	42	58	57	62	61	57	62
TEGUCIGALPA	HO	23	16	17	14	28	34	33	35	38	35	26	26
TEL A	HO	68	61	60	47	52	54	47	40	70	68	70	59
HANAGUA	NK	59	42	28	23	53	80	80	85	89	93	95	74
HOWARD AFB	PH	7	6	12	18	47	46	34	39	48	54	46	23
TOCUMEN	PH	77	60	57	52	73	56	60	58	64	57	57	66
1200Z		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	49	40	40	48	40	30	38	46	60	59	41	49
LIMON	CS	28	22	13	16	24	22	18	24	30	35	26	23
NICOCYA	CS	77	53	70	64	94	96	87	96	98	99	69	74
PUNTARENAS	CS	88	78	88	84	80	80	86	85	91	89	81	
SAN JOSE	CS	4	4	4	4	6	13	9	10	8	13	13	10
ACAJUTLA	ES	8	8	12	14	10	19	31	33	11	18	6	7
SAN SALVADOR	ES	12	20	43	26	31	26	23	17	28	14	9	10
SANTA ANA	ES	54	58	58	60	78	76	64	58	63	61	42	37
FLORES	GU	89	88	83	85	93	96	97	97	90	88	92	
GUATEMALA CITY	GU	19	24	36	35	51	36	21	23	26	17	14	20
HUEHUETENANGO	GU	96	98	99	98	98	97	96	99	97	97	98	95
POPTUN	GU	93	73	82	64	82	88	93	99	91	98	97	82
PUERTO BARRIOS	GU	46	49	58	63	68	65	62	69	58	48	47	57
RETALHULEU	GU	57	60	72	62	86	77	70	78	91	81	86	48
SAN JOSE	GU	81	92	91	90	86	76	86	81	84	88	85	89
CATACAMAS	HO	76	51	52	45	65	78	60	56	55	52	54	62
ISLAS DEL CISNE	HO	0	0	*	*	0	0	0	0	*	3	4	*
SAN PEDRO SULA	HO	78	72	80	78	71	80	82	82	79	75	73	76
TEGUCIGALPA	HO	35	34	31	34	49	47	43	45	61	43	26	32
TEL A	HO	83	78	82	79	84	78	84	89	82	72	76	79
BLUEFIELDS	NK	31	14	14	0	25	33	37	29	33	22	23	
HANAGUA	NK	68	71	68	71	86	87	86	91	93	98	96	84
PUERTO CABEZAS	NK	6	8	17	25	5	0	6	*	17	7	6	*
RIVAS	NK	21	12	21	27	60	61	38	56	70	79	55	35

TABLE B-10, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BOCAS DEL TORO INTL	PH	41	39	54	45	56	52	49	57	63	76	51	39
CHANGUINOLA INTL	PH	60	50	41	73	57	52	52	55	50	55	68	52
DAVID	PH	65	60	68	60	77	65	75	81	84	86	86	80
FORT SHERMAN	PH	30	17	17	20	43	55	42	52	51	46	42	32
HOWARD AFB	PH	18	9	17	25	48	65	41	51	54	54	46	44
PANAMA CITY	PH	46	40	45	53	65	64	71	76	79	59	59	59
PORENVIR	PH	0	0	3	3	2	3	0	5	4	3	5	1
RIO HATO	PH	67	55	53	44	45	38	39	37	46	50	33	27
SANTIAGO	PH	69	89	70	83	80	73	77	84	80	69	88	91
TOCUMEN	PH	71	59	62	62	61	59	60	58	58	55	62	66
 1800Z													
BELIZE INTL	BZ	9	13	0	9	14	11	7	10	13	11	8	14
LIBERIA	CS	15	8	15	21	44	52	27	38	60	50	28	32
LIMON	CS	15	13	8	10	9	5	9	17	15	6	5	5
NICOCYA	CS	26	16	12	16	48	52	50	47	63	56	35	25
PUNTARENAS	CS	21	6	3	8	16	26	30	27	22	21	26	30
SAN JOSE	CS	0	1	0	*	*	2	2	0	*	2	1	0
ACAJUTLA	ES	0	1	0	*	2	3	2	2	1	2	1	1
SAN SALVADOR	ES	4	4	3	5	8	6	10	7	13	4	5	*
SANTA ANA	ES	29	32	27	31	41	48	40	29	38	31	19	25
 FLORES	GU	38	38	20	21	40	50	50	47	50	49	50	50
GUATEMALA CITY	GU	7	15	12	11	11	13	6	6	10	5	6	7
HUEHUETENANGO	GU	38	53	47	49	71	51	31	31	52	60	52	48
POPTUN	GU	30	22	51	25	54	50	28	28	36	43	53	46
PUERTO BARRIOS	GU	6	6	3	4	5	7	9	7	7	12	20	8
RETALHULEU	GU	59	30	44	45	59	41	18	24	21	30	21	40
SAN JOSE	GU	11	0	4	4	8	10	9	12	22	21	19	7
CATACAMAS	HO	41	24	18	19	27	34	20	30	35	39	36	38
CHOLUTECA	HO	30	11	16	36	17	18	10	16	17	20	13	6
GUANAJA	HO	25	19	11	7	20	6	14	23	27	32	42	17
ISLAS DEL CISNE	HO	0	0	0	0	0	0	0	0	*	0	*	0
LA CEIBA	HO	13	13	9	5	6	10	14	10	8	16	15	13
PUERTO LEMPIRA	HO	8	7	10	8	*	8	7	12	12	20	8	6
SAN PEDRO SULA	HO	47	40	36	33	35	43	34	42	36	41	38	47
TEGUCIGALPA	HO	4	5	5	6	6	7	4	6	7	8	0	6
TELA	HO	10	12	10	15	*	12	6	10	14	12	13	14
BLUEFIELDS	NK	15	4	4	8	9	8	16	13	14	14	7	6
CHINANDEGA	NK	7	5	6	30	11	22	22	23	21	16	7	21
JIJIGALPA	NK	*	1	1	1	15	10	2	3	5	1	*	1
MANAGUA	NK	0	*	*	*	5	14	14	5	7	10	19	7
PUERTO CABEZAS	NK	1	4	6	13	28	29	7	5	5	7	3	2
RIVAS	NK	4	4	6	13	28	29	7	19	30	30	22	6

TABLE B-10, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BOCAS DEL TORO INTL	PH	10	8	11	9	12	15	12	17	12	7	17	8
CHANGUINOLA INTL	PH	34	8	15	7	9	17	16	13	14	6	7	6
DAVID	PH	9	6	7	14	13	18	20	16	18	19	9	13
FORT SHERMAN	PH	1	*	1	11	14	10	9	7	6	7	5	
HOWARD AFB	PH	13	3	0	7	4	7	6	8	5	12	7	6
JACQUE	PH	25	22	23	20	31	21	30	31	29	22	27	31
LA PALMA	PH	15	14	10	23	23	21	24	19	17	19	20	25
PANAMA CITY	PH	5	8	4	6	9	11	11	17	8	12	9	
PORVENIR	PH	1	*	2	*	8	10	10	12	13	13	8	3
RIO HATO	PH	5	5	6	4	6	7	9	8	8	9	6	9
SANTIAGO	PH	10	7	7	18	26	16	21	18	17	13	16	13
TOCUMEN	PH	10	5	8	7	11	16	13	14	10	14	16	9

NOTE: AN * DENOTES AN OCCURRENCE OF LESS THAN .5 Z

TABLE B-11. Ceilings > 3,000 ft.: Percent Frequency of Occurrence, Selected Times

			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0000Z	BELIZE INTL	BZ	91	94	89	88	93	87	93	93	95	93	91	84
LIBERIA	CS	100	100	99	99	89	96	89	92	87	98	96	96	96
LIMON	CS	80	60	78	73	72	64	61	58	86	79	82	82	82
NICOYA	CS	98	97	96	89	83	85	88	83	81	73	84	96	96
PUNTARENAS	CS	97	99	100	98	88	88	94	89	90	84	88	97	97
SAN JOSE	CS	98	99	99	95	87	79	91	79	74	62	75	91	91
ACAJUTLA	ES	100	100	100	100	99	98	98	100	95	98	99	100	100
SAN SALVADOR	ES	100	100	100	97	96	92	95	98	95	95	100	100	100
SANTA ANA	ES	100	100	100	99	99	93	100	99	99	98	99	100	100
FLORES	GU	77	87	88	94	92	88	93	95	81	81	82	78	78
GUATEMALA CITY	GU	87	87	81	80	71	68	81	71	62	70	83	84	84
HUEHUETENANGO	GU	92	88	81	81	67	67	79	78	68	73	74	91	91
POPTUN	GU	90	89	90	93	91	94	93	94	79	74	62	81	81
PUERTO BARRIOS	GU	77	76	87	79	89	72	62	76	83	79	71	75	75
RETALHULEU	GU	87	82	73	89	71	73	77	69	72	67	91	90	90
SAN JOSE	GU	100	98	98	92	88	79	85	81	75	76	92	96	96
CATACAMAS	HO	97	98	99	97	96	91	92	97	94	94	95	95	95
CHOLUTECA	HO	100	100	99	100	96	96	97	97	97	92	98	97	97
GUANAJA	HO	91	88	98	91	89	75	89	100	92	94	84	88	88
ISLAS DEL CISNE	HO	93	94	95	96	98	94	95	95	89	92	94	92	92
LA CEIBA	HO	82	75	91	88	94	81	86	88	86	81	80	78	78
PUERTO LEMPIRA	HO	93	93	94	94	99	86	82	83	92	89	87	90	90
SAN PEDRO SULA	HO	84	90	95	95	97	89	92	95	94	94	93	89	89
TEGUCIGALPA	HO	86	92	96	99	96	91	91	91	85	82	86	80	80
TEL A	HO	78	77	89	87	95	82	78	84	86	80	72	72	72
BLUEFIELDS	NK	92	83	87	88	83	82	86	89	95	90	92	95	95
CHINANDEGA	NK	100	96	92	94	88	79	88	84	87	80	83	86	86
JUIGALPA	NK	74	83	80	79	73	49	52	62	58	76	62	80	80
MANAGUA	NK	94	95	96	96	92	85	86	84	81	83	88	92	92
PUERTO CABEZAS	NK	86	91	87	92	80	67	79	77	87	86	82	83	83
RIVAS	NK	98	99	99	100	97	89	93	91	92	89	92	97	97
BOCAS DEL TORO INTL	PH	91	92	95	90	91	90	91	94	91	94	99	91	91
CHANGUINOLA INTL	PH	89	91	98	86	92	91	85	94	90	91	84	93	93
DAVID	PH	98	98	94	93	77	77	81	81	66	67	75	88	88
HOWARD AFB	PH	100	100	100	99	99	97	97	97	98	98	96	100	100
LA PALMA	PH	100	100	98	99	95	93	96	95	92	96	94	95	95
PANAMA CITY	PH	100	99	99	97	95	93	96	97	97	96	95	96	96
PORVENIR	PH	100	99	99	99	98	99	98	100	99	97	97	98	98
RIO HATO	PH	100	100	100	96	94	92	98	93	97	82	94	99	99
SANTIAGO	PH	100	100	99	100	95	97	99	96	97	96	96	97	97
TOCUMEN	PH	100	99	99	95	93	92	95	97	89	90	92	97	97

TABLE B-11, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
0600Z	BELIZE INTL	BZ	85	84	86	83	85	70	87	88	81	80	86	80
SAN JOSE	CS	98	100	99	97	91	94	93	93	91	82	92	99	
ACAJUTLA SAN SALVADOR	ES	100	100	99	99	100	100	99	98	98	99	100	100	
GUATEMALA CITY HUEHUETENANGO PUERTO BARRIOS SAN JOSE	GU	63	70	73	65	62	45	51	46	44	49	54	56	
CATACAMAS CHOLUTeca ISLAS DEL CISNE SAN PEDRO SULA TEGUCIGALPA TEL A	HO	100	99	100	98	95	91	96	98	89	95	98	100	
HANAGUA HOWAD AFB TOCUMEN	NK	99	97	100	99	91	87	93	89	87	89	95	99	
1200Z	BELIZE INTL	BZ	78	74	85	85	79	76	83	85	78	69	70	71
LIMON NICOYA PUNTARENAS SAN JOSE	CS	84	83	86	84	85	87	80	85	95	98	88	85	
ACAJUTLA SAN SALVADOR SANTA ANA	ES	100	100	99	100	97	98	96	100	98	96	95	99	
FLORES GUATEMALA CITY HUEHUETENANGO POPTUN PUERTO BARRIOS RETALHULEU SAN JOSE	GU	49	62	71	81	81	76	74	62	63	44	46	51	

TABLE B-11, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAMAS	HO	92	93	94	93	91	94	92	91	92	89	83	
CHOLUTeca	HO	100	99	99	100	94	100	98	99	96	98	99	
ISLAS DEL CISNE	HO	94	95	97	98	96	93	96	95	96	89	90	
SAN PEDRO SULA	HO	81	88	95	93	96	94	93	95	95	90	87	
TEGUCIGALPA	HO	59	77	77	79	80	57	63	56	58	57	49	
TELA	HO	86	83	84	91	95	95	94	96	93	79	78	
BLUEFIELDS	NK	89	83	83	82	78	79	75	85	91	86	89	
MANAGUA	NX	98	98	97	98	95	88	92	90	89	90	97	
PUERTO CABEZAS	NK	77	84	84	80	70	74	70	74	82	82	81	
RIVAS	NK	98	97	100	96	97	85	88	81	89	85	90	
BOCAS DEL TORO INTL	PM	84	87	86	81	90	83	75	78	89	89	81	
CHANGUINOLA INTL	PH	90	89	83	80	85	84	77	89	94	89	85	
DAVID	PH	100	100	98	98	94	96	91	92	93	91	89	
FORT SHERMAN	PH	87	91	91	78	78	68	67	62	84	84	66	
HOWARD AFB	PH	100	100	99	98	99	98	98	99	99	100	99	
PANAMA CITY	PH	100	100	99	97	91	90	97	92	95	95	97	
POVENIR	PH	100	100	98	96	97	92	92	96	95	96	92	
RIO HATO	PH	100	100	100	99	99	95	99	99	97	98	100	
TOCUMEN	PH	100	99	98	95	93	94	99	96	95	93	96	
1800Z													
BELIZE INTL	BZ	72	69	77	73	75	66	76	73	68	61	72	
LIBERTAD	CS	100	100	100	93	91	84	91	86	86	93	100	
LIMON	CS	89	88	92	86	95	96	92	92	96	94	91	
NICOCIA	CS	100	98	99	97	90	90	93	90	84	83	88	
PUNTARENAS	CS	100	100	100	99	98	90	100	98	97	96	99	
SAN JOSE	CS	100	100	100	100	100	98	100	99	97	96	100	
ACAJUTLA	ES	100	100	100	100	99	99	100	100	100	100	100	
SAN SALVADOR	ES	100	100	98	100	91	87	98	92	86	88	98	
SANTA ANA	ES	100	100	98	99	100	95	98	99	97	100	98	
FLORES	GU	64	66	74	78	83	66	68	71	68	68	61	
GUATEMALA CITY	GU	73	70	79	72	75	51	59	50	55	53	71	
HUEHUETENANGO	GU	93	93	95	92	86	86	87	81	82	79	89	
POPTUN	GU	38	45	60	52	61	43	51	54	35	25	37	
PUERTO BARRIOS	GU	73	72	78	80	89	77	75	82	93	83	81	
RETALHULEU	GU	93	86	83	80	89	87	84	86	77	83	92	
SAN JOSE	GU	100	99	99	94	93	96	96	91	92	100	100	

TABLE B-II, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAMAS	HO	89	93	98	97	97	93	91	93	93	92	93	87
CHOLUTeca	HO	100	100	100	100	97	97	99	99	94	97	100	96
GUANAJA	HO	76	75	91	90	96	89	87	93	94	82	73	86
ISLAS DEL CISNE	HO	88	94	92	95	93	95	95	96	93	91	87	95
LA CEIBA	HO	80	91	99	93	98	91	95	98	94	87	83	79
PUERTO LEMPIRA	HO	79	80	80	83	78	75	77	75	83	87	76	74
SAN PEDRO SULA	HO	84	81	93	93	97	87	87	90	89	85	85	84
TEGUCIGALPA	HO	82	91	95	96	95	85	87	87	89	86	81	81
TELA	HO	83	85	88	89	96	87	90	96	95	87	77	76
BLUEFIELDS	NK	76	75	67	75	67	64	65	72	79	77	75	63
CHINANDEGA	NK	97	98	90	90	83	81	93	86	79	74	85	92
JUIGALPA	NK	53	53	53	56	54	31	39	40	32	34	33	44
MANAGUA	NK	90	95	86	89	80	74	76	81	76	88	91	90
PUERTO CABEZAS	NK	89	88	84	88	90	76	84	86	84	76	75	80
RIVAS	NK	99	99	99	100	97	91	88	89	91	90	93	97
BOCAS DEL TORO INTL	PM	90	88	92	89	96	90	87	88	92	92	88	86
CHANGUINOLA INTL	PM	84	65	89	85	92	92	90	91	92	91	88	87
DAVID	PM	100	98	96	93	88	85	87	82	81	81	81	94
FORT SHERMAN	PH	92	92	92	84	77	58	69	73	83	79	75	82
HOWARD AFB	PH	100	100	99	98	96	98	99	98	98	98	95	97
JAQUE	PH	100	100	108	95	94	93	89	91	88	82	84	92
LA PALMA	PH	100	99	100	98	99	97	98	98	98	96	97	98
PANAMA CITY	PH	100	98	99	96	96	97	98	94	97	95	97	99
POVENIR	PH	100	100	100	98	98	99	100	99	98	98	98	98
RIO HATO	PH	99	100	100	97	95	94	97	97	96	96	96	97
SANTIAGO	PH	99	99	100	97	97	98	100	98	97	97	97	95
TOCUMEN	PH	100	96	98	95	90	94	91	86	89	86	86	89

TABLE B-12 Ceilings > 1,500 ft: Percent Frequency of Occurrence, Selected Times

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC.
0000Z	BELIZE INTL	BZ	98	99	96	97	100	97	99	99	98	97	94
LIBERIA	CS	100	100	100	100	99	97	99	99	100	97	98	100
LIMON	CS	98	100	99	100	100	99	99	99	99	100	98	99
NICoya	CS	100	100	100	100	99	99	99	99	99	97	98	100
PUNTARENAS	CS	100	100	100	100	98	96	98	99	97	98	99	100
SAN JOSE	CS	99	99	100	98	93	86	93	87	84	78	84	94
ACAJUTLA	ES	100	100	100	100	100	99	100	99	100	100	100	100
SAN SALVADOR	ES	100	100	100	99	99	97	98	100	100	98	100	100
SANTA ANA	ES	100	100	100	99	99	96	100	100	99	100	100	100
FLORES	GU	91	96	96	99	100	100	99	100	97	94	95	90
GUATEMALA CITY	GU	100	99	97	97	94	91	98	91	82	92	98	97
HUEHUETENANGO	GU	99	100	99	100	98	96	99	100	98	99	97	99
POPTUN	GU	92	95	100	97	95	99	96	100	91	85	84	94
PUERTO BARRIOS	GU	94	94	97	97	98	95	96	96	98	96	96	93
RETALHULEU	GU	100	100	100	97	99	95	95	95	95	93	100	100
SAN JOSE	GU	100	100	100	100	96	99	99	97	97	97	99	100
CATACAMAS	HO	99	100	100	99	99	99	99	100	100	99	99	100
CHOLUTECAS	HO	100	100	100	100	98	99	100	99	98	99	99	100
GUANAJA	HO	100	99	100	100	100	100	100	100	100	100	98	100
ISLAS DEL CISNE	HO	98	98	98	99	99	96	97	98	93	95	98	96
LA CEIBA	HO	97	95	97	97	99	97	99	100	100	96	98	96
PUERTO LEMPIRA	HO	98	98	99	99	100	100	96	98	99	98	97	99
SAN PEDRO SULA	HO	98	99	99	98	99	98	98	100	98	100	98	99
TEGUCIGALPA	HO	100	100	100	99	100	98	100	100	99	99	100	99
TEL A	HO	98	95	97	98	100	98	99	100	99	97	97	95
BLUEFIELDS	NK	95	97	96	97	96	90	92	95	96	96	95	97
CHINANDEGA	NK	100	100	100	100	100	100	100	100	100	100	100	100
JUIGALPA	NK	100	100	100	100	100	100	100	100	99	100	100	93
MANAGUA	NK	100	100	100	100	100	100	100	100	99	100	99	100
PUERTO CABEZAS	NK	99	98	99	99	96	91	95	96	99	95	96	97
RIVAS	NK	100	100	100	100	99	99	100	99	100	98	100	99
BOCAS DEL TORO INTL	PH	100	97	99	99	99	99	99	99	99	99	99	100
CHANGUINOLA INTL	PH	97	98	100	99	99	98	98	99	99	99	99	98
DAVID	PH	100	99	100	98	96	92	90	94	94	87	90	96
HOWARD AFB	PH	100	100	100	100	100	99	99	100	100	100	100	100
LA PALMA	PH	100	100	99	100	99	99	99	100	100	98	98	100
PANAMA CITY	PH	100	100	99	100	100	100	100	100	100	100	99	100
PORVENIR	PH	100	100	100	100	100	100	100	100	100	99	100	100
RIO HATO	PH	100	100	100	100	99	99	100	100	100	99	99	100
SANTIAGO	PH	100	100	100	100	100	98	98	99	100	99	99	100
TOCUMEN	PH	100	100	100	100	98	97	98	99	97	95	97	100

TABLE B-12, Cont'd

			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0600Z	BELIZE INTL	BZ	94	93	93	92	96	95	99	99	93	87	91	87
SAN JOSE	SAN SALVADOR	CS	98	100	99	98	91	94	95	94	95	86	94	99
ACAJUTLA		ES	100	100	100	99	100	100	100	100	100	100	100	100
GUATEMALA CITY		GU	74	80	79	81	77	60	65	60	56	66	63	70
HUEHUETENANGO		GU	100	100	98	99	96	100	96	96	97	98	100	
PUERTO BARRIOS		GU	100	97	97	98	100	97	98	98	99	93	95	93
SAN JOSE		GU	100	100	100	100	100	97	97	100	99	99	100	100
CATACAMAS		HO	97	99	100	100	98	98	100	96	96	95	96	98
CHOLUTECA		HO	100	100	100	100	100	97	100	100	96	98	100	100
ISLAS DEL CISNE		HO	99	99	99	100	100	98	99	100	96	97	99	99
SAN PEDRO SULA		HO	99	89	99	100	100	98	98	99	99	100	98	100
TEGUCIGALPA		HO	100	100	99	99	99	98	99	100	100	99	98	99
TEL A		HO	99	94	97	100	100	99	99	100	100	96	97	97
MANAGUA		NK	100	100	100	100	100	100	100	100	100	99	100	100
HOWARD AFB		PM	100	100	100	100	100	100	100	100	100	100	100	100
TOCUMEN		PH	100	100	100	100	99	98	100	98	99	99	100	100
1200Z	BELIZE INTL	BZ	87	88	94	94	97	87	95	96	86	85	79	83
LIMON		CS	99	99	100	99	100	99	100	99	100	99	99	98
NICoya		CS	100	100	100	100	97	97	97	96	97	91	92	99
PUNTARENAS		CS	100	100	100	100	98	100	99	99	98	98	98	100
SAN JOSE		CS	100	100	100	99	93	98	100	99	98	96	99	100
ACAJUTLA		ES	100	100	100	100	100	99	100	100	100	100	100	100
SAN SALVADOR		ES	99	100	99	100	97	93	94	91	90	95	97	100
SANTA ANA		ES	100	100	99	100	100	98	100	96	92	100	100	100
FLORES		GU	52	66	76	85	87	81	78	66	68	49	53	52
GUATEMALA CITY		GU	67	68	61	69	79	72	72	69	74	75	74	73
HUEHUETENANGO		GU	84	89	97	92	91	87	86	81	75	76	75	79
POPTUN		GU	67	81	87	87	86	91	87	80	70	42	47	79
PUERTO BARRIOS		GU	90	91	90	94	97	96	93	90	95	93	84	88
RETALHULEU		GU	100	100	100	100	100	95	99	99	96	100	98	100
SAN JOSE		GU	99	100	98	100	99	97	99	100	99	100	100	99

TABLE B-12, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAMAS	HO	98	98	100	99	97	98	98	95	95	98	96	96
CHOLUTeca	HO	100	100	100	100	98	100	100	97	97	99	100	100
ISLAS DEL CISNE	HO	98	98	99	99	97	96	97	97	97	94	97	95
SAN PEDRO SULA	HO	93	93	99	99	100	98	99	98	100	97	95	97
TEGUCIGALPA	HC	98	97	99	99	100	98	95	98	96	96	94	94
TELA	HO	98	96	99	100	100	99	98	100	99	97	96	95
BLUEFIELDS	NK	89	97	93	96	91	90	92	86	90	96	89	92
MANAGUA	NK	100	99	100	100	100	100	100	100	100	100	100	100
PUERTO CABEZAS	NK	92	95	96	95	96	92	91	96	99	95	93	99
RIVAS	NK	100	100	100	100	100	100	98	98	100	99	100	99
ROCS DEL TORO INTL	PH	99	100	99	100	98	97	99	100	99	99	99	98
CHANGUINOLA INTL	PH	99	100	96	96	100	99	99	97	96	97	97	97
DAVID	PH	100	100	100	100	99	99	99	97	96	97	93	98
FORT SHERMAN	PH	89	92	92	84	86	71	72	64	85	86	77	86
HOWARD AFB	PH	100	100	100	100	100	100	100	100	100	100	100	100
PANAMA CITY	PH	100	100	100	100	99	99	100	99	99	99	99	100
PORVENIR	PH	100	100	100	100	100	99	99	100	100	100	98	100
RIO HATO	PH	100	100	100	100	100	100	100	100	100	100	100	100
TOCUMEN	PH	100	100	100	99	98	98	100	99	99	98	99	100
 1800Z													
BELIZE INTL	BZ	99	94	100	97	99	93	99	98	97	93	95	89
LIBERIA	CS	100	100	100	100	100	98	99	99	99	99	99	100
LIMON	CS	99	99	100	98	100	100	99	99	100	99	100	100
NICOCYA	CS	100	100	100	100	100	100	99	100	100	98	99	99
PUNTARENAS	CS	100	100	100	99	100	100	100	100	100	99	100	100
SAN JOSE	CS	100	100	100	100	100	99	100	100	100	99	100	100
ACAJUTLA	ES	100	100	100	100	99	100	100	100	100	100	100	100
SAN SALVADOR	ES	100	100	100	100	98	97	100	98	97	99	100	100
SANTA ANA	ES	100	100	99	99	100	97	100	100	98	100	100	100
FLORES	GU	87	86	97	98	99	99	100	97	97	93	92	87
GUATEMALA CITY	GU	99	99	99	100	99	97	98	97	96	99	100	99
HUEHUETENANGO	GU	99	100	99	100	99	100	99	99	99	97	95	98
POPTUN	GU	90	98	96	91	99	92	88	97	88	74	89	89
PUERTO BARRIOS	GU	94	94	98	100	99	97	99	99	99	95	97	95
RETALHULEU	GU	100	100	100	100	99	99	100	100	100	95	100	100
SAN JOSE	GU	100	100	100	100	100	98	100	100	100	98	99	100

TABLE B-12, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAMAS	HO	98	98	100	99	97	98	98	98	95	95	96	96
CATACAMAS	HO	100	99	100	100	99	100	99	100	100	99	99	100
CHOLUTECA	HO	100	100	100	100	99	100	99	100	98	100	100	100
GUANAJA	HO	97	100	100	98	100	100	100	100	100	98	100	100
ISLAS DEL CISNE	HO	98	99	98	99	99	97	97	99	99	97	94	98
LA CEBRA	HO	96	98	100	95	100	100	100	100	98	97	94	97
PUERTO LEMPIRA	HO	96	98	100	98	99	99	97	98	100	97	97	99
SAN PEDRO SULA	HO	99	99	100	98	100	100	100	100	99	99	99	99
TEGUCIGALPA	HO	99	100	100	100	99	100	100	99	100	100	100	99
TEL A	HO	96	95	98	99	99	100	100	100	100	98	96	95
BLUEFIELDS	NK	92	96	91	98	92	83	81	83	85	91	87	91
CHINANDEGA	NK	100	100	100	100	100	100	100	100	100	100	100	100
JUIGALPA	NK	99	100	100	100	100	98	100	99	100	100	100	100
MANAGUA	NK	100	100	100	100	100	100	100	100	100	100	100	100
PUERTO CABEZAS	NK	99	100	98	99	100	94	98	99	99	98	97	98
RIVAS	NK	100	100	100	100	100	100	99	99	100	100	100	100
BOCAS DEL TORO INTL	PH	100	100	100	99	100	98	99	99	100	100	99	98
CHANGUINOLA INTL	PH	98	99	99	99	99	100	99	100	99	100	99	96
DAVID	PH	100	100	100	99	99	99	99	99	96	95	95	100
FORT SHERMAN	PH	97	98	96	93	87	72	76	82	89	84	81	92
HOWARD AFB	PH	100	100	100	100	100	100	100	100	100	99	99	99
JAQUE	PH	100	100	100	100	99	99	99	99	98	97	99	99
LA PALMA	PH	100	100	100	100	100	100	100	100	100	100	100	100
PANAMA CITY	PH	100	100	100	100	100	100	99	100	99	99	99	100
PORE-VIR	PH	100	100	100	100	100	100	100	100	100	100	100	100
RIO HATO	PH	100	100	100	100	100	100	100	100	100	100	100	100
SANTIAGO	PH	100	100	100	100	100	100	100	100	100	99	100	100
TOCUMEN	PH	100	100	98	99	98	99	96	99	96	97	98	100

TABLE B-13 Ceilings > 1,000 ft: Percent Frequency of Occurrence, Selected Times

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0000Z		99	99	99	99	100	99	100	99	100	100	99	95
BELIZE INTL	BZ	100	100	100	100	99	97	100	100	100	100	99	100
LIBERIA	CS	100	99	100	100	100	100	100	100	100	100	100	100
LIMON	CS	100	100	100	100	100	100	100	100	100	100	100	100
NICOYA	CS	100	100	100	100	100	99	100	100	100	100	100	100
PUNTARENAS	CS	100	100	100	100	100	99	100	100	100	100	100	100
SAN JOSE	CS	100	100	100	99	94	88	95	92	90	82	86	96
ACAJUTLA	ES	100	100	100	100	100	100	99	100	100	100	100	100
SAN SALVADOR	ES	100	100	100	100	100	99	100	100	99	100	100	100
SANTA ANA	ES	100	100	100	99	99	97	100	100	99	100	100	100
FLORES	GU	97	98	97	99	100	100	99	100	98	97	98	93
GUATEMALA CITY	GU	100	100	100	99	98	95	100	96	91	98	100	100
HUEHUETENANGO	GU	100	100	100	99	100	99	99	100	99	100	100	100
POPTUN	GU	95	98	100	97	97	100	99	100	97	92	92	98
PUERTO BARRIOS	GU	98	99	100	99	99	99	99	100	100	99	99	99
RETALHULEU	GU	100	100	100	98	99	99	100	100	99	98	100	100
SAN JOSE	GU	100	100	100	100	100	100	100	100	100	100	100	100
CATACAMAS	HO	99	100	100	99	99	100	100	100	100	99	99	100
CHOLUTECA	HO	100	100	100	100	100	100	100	100	100	99	99	100
GUANAJA	HO	100	99	100	100	100	100	100	100	100	100	100	100
ISLAS DEL CISNE	HO	100	99	100	100	100	99	99	100	99	99	100	99
LA CEIBA	HO	99	97	99	99	100	98	99	100	100	99	98	98
PUERTO LEMPIRA	HO	99	99	100	100	100	100	99	99	99	100	99	99
SAN PEDRO SULA	HO	98	99	99	98	99	99	98	100	100	99	100	99
TEGUCIGALPA	HO	100	100	100	99	100	100	100	100	100	99	100	99
TELA	HO	100	99	100	100	100	100	100	100	99	99	99	100
BLUEFIELD	NK	99	99	99	99	99	97	97	98	98	99	98	100
CHINANDEGA	NK	100	100	100	100	100	100	100	100	100	100	100	100
JUIGALPA	NK	100	100	100	100	100	100	100	99	99	100	100	98
MANAGUA	NK	100	100	100	100	100	100	100	99	100	99	100	99
PUERTO CABEZAS	NK	99	99	100	99	99	95	96	98	99	97	97	98
RIVAS	NK	100	100	100	100	100	100	100	99	100	100	100	100
BOCAS DEL TORO INTL	PH	100	99	100	100	99	99	100	100	99	100	100	100
CHANGUINOLA INTL	PH	99	99	100	100	99	99	100	100	99	100	100	99
DAVID	PH	100	100	100	99	95	94	99	97	94	95	99	100
HOWARD AFB	PH	100	100	100	100	100	99	100	100	100	100	100	100
LA PALMA	PH	100	100	100	100	99	99	99	100	100	99	100	100
PANAMA CITY	PH	100	100	99	100	100	100	100	100	100	100	100	100
PORVENIR	PH	100	100	100	100	100	100	100	100	100	100	100	100
RIO HATO	PH	100	100	100	99	100	100	100	100	100	100	100	100
SANTIAGO	PH	100	100	100	100	100	100	98	99	99	100	100	95
TOCUMEN	PH	100	100	100	100	100	100	100	100	99	99	80	100

TABLE B-13, Cont'd

0600Z		JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC											
BELIZE INTL	BZ	97	98	95	100	96	97	100	99	100	94	95	90
SAN JOSE	CS	99	100	100	99	95	94	96	94	96	89	96	99
ACAJUTLA SAN SALVADOR	ES	100	100	100	99	100	100	100	100	100	100	100	100
GUATEMALA CITY HUEHUETENANGO PUERTO BARRIOS SAN JOSE	GU	81	91	92	90	86	76	82	79	76	79	82	80
CATACAMAS CHOLUTECA ISLAS DEL CISNE SAN PEDRO SULA TEGUCIGALPA TEL A	HO	100	100	100	98	99	100	100	97	100	100	100	100
HANAGUA HOWARD AFB TOCUREN	NK	100	100	100	100	100	100	100	100	100	100	100	100
FLORES	PM	100	100	100	100	100	100	100	100	100	100	100	100
1200Z		JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC											
BELIZE INTL	BZ	89	93	97	98	96	95	97	99	94	84	82	85
LIMON NICUYA PUNTARENAS SAN JOSE	CS	100	99	100	99	100	99	100	99	100	100	99	99
ACAJUTLA SAN SALVADOR SANTA ANA	ES	100	100	100	100	100	99	100	100	100	100	100	100
FLORES GUATEMALA CITY HUEHUETENANGO POPTUN PUERTO BARRIOS RETALHULEU SAN JOSE	GU	56	75	79	87	91	83	81	70	72	54	58	53
	GU	79	79	76	82	86	82	84	81	81	86	83	80
	GU	89	96	98	96	93	96	92	95	90	90	90	88
	GU	83	85	98	95	92	93	88	86	72	52	69	62
	GU	99	99	108	99	100	100	100	100	100	98	98	96
	GU	100	100	100	100	100	97	99	99	100	100	100	100
	GU	99	100	98	100	99	99	100	100	100	100	100	99

TABLE B-13, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAMAS	HO	98	98	100	99	98	98	99	98	95	99	99	96
CHOLUTeca	HO	100	100	100	100	98	100	100	97	99	100	100	100
ISLAS DEL TSNE	HO	100	100	100	100	99	100	100	100	100	100	100	100
SAN PEDRO SULA	HO	96	99	99	99	100	98	99	98	100	97	95	97
TEGUCIGALPA	HO	99	98	100	99	100	99	99	98	96	97	94	95
TELA	HO	100	100	100	100	99	100	100	100	100	100	100	99
BLUEFIELDS	NK	94	100	97	97	97	97	100	95	92	98	94	95
MANAGUA	NK	100	99	100	97	100	100	100	100	99	100	100	100
PUERTO CABEZAS	NK	94	99	99	96	96	97	92	99	99	95	94	100
RIVAS	NK	100	100	100	100	100	100	100	99	100	99	100	99
BOCAS DEL TORO INTL	PM	100	100	100	99	99	99	99	100	100	99	100	100
CHANGUINOLA INTL	PH	100	100	100	99	100	100	100	100	100	100	100	100
DAVID	PH	100	100	100	100	99	99	99	98	98	97	95	99
FORT SHERMAN	PH	95	99	99	97	99	90	93	92	98	97	96	93
HOWARD AFB	PH	100	100	100	100	100	100	100	100	100	100	100	100
PANAMA CITY	PH	100	100	100	100	100	100	100	100	100	100	100	100
POBRENIr	PH	100	100	100	100	100	100	100	100	100	100	100	100
RIO HATO	PH	100	100	100	100	100	100	100	100	100	100	100	100
TOCUMEN	PH	100	100	100	100	99	100	99	100	100	99	100	100

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1800Z	BZ	99	98	100	99	100	98	99	99	99	99	98	99
BELIZE INTL	CS	100	100	100	100	100	99	100	100	100	99	99	99
LIBERIA	CS	100	100	100	100	100	100	100	100	100	100	100	100
LIMON	CS	100	100	100	100	100	100	100	100	100	100	100	100
NICOCYA	CS	100	100	100	100	100	100	100	100	100	100	100	100
PUNTARENAS	CS	100	100	100	99	100	100	100	100	100	100	100	100
SAN JOSE	CS	100	100	100	100	100	99	100	100	100	100	100	100
ACAJUTLA	ES	100	100	100	100	100	100	100	100	100	100	100	100
SAN SALVADOR	ES	100	100	100	100	100	98	100	100	100	100	100	100
SANTA ANA	ES	100	100	99	99	100	97	100	100	100	100	100	100
FLORES	GU	97	94	98	99	99	100	99	100	98	96	97	93
GUATEMALA CITY	GU	100	99	100	100	100	99	100	100	98	100	100	100
HUEHUETENANGO	GU	99	100	100	100	100	100	99	100	100	100	100	100
POPTUN	GU	93	98	100	96	99	99	99	100	96	95	98	98
PUERTO BARRIOS	GU	100	99	100	100	100	100	99	100	100	99	99	99
RETALHULEU	GU	100	100	100	100	100	100	100	100	98	100	100	100
SAN JOSE	GU	100	100	100	100	100	100	100	100	99	100	100	100

TABLE B-1-3, cont'd.

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAMAS	HO	100	99	100	100	99	100	100	100	100	99	99	100
CHOLUTECA	HO	100	100	100	100	100	99	100	100	100	100	100	100
GUANAJA	HO	100	98	100	100	100	100	100	100	100	100	100	100
ISLAS DEL CISNE	HO	100	100	99	99	99	99	100	100	100	100	99	100
LA CEIBA	HO	98	100	98	100	100	100	100	100	100	99	99	97
PUERTO LEMPIRA	HO	99	100	100	100	100	100	100	100	100	100	100	99
SAN PEDRO SULA	HO	100	99	100	98	100	100	100	100	100	99	99	99
TEGUCIGALPA	HO	100	100	100	100	100	99	100	100	100	100	100	100
TEL A	HO	99	99	100	100	100	100	100	100	100	99	100	98
BLUEFIELDS	NK	99	99	98	100	98	95	95	97	95	97	99	99
CHINANDEGA	NK	100	100	100	100	100	100	100	100	100	100	100	100
JUIGALPA	NK	99	100	100	100	100	96	100	99	100	100	100	100
MANAGUA	NK	100	100	00	100	100	100	100	100	100	100	100	100
PUERTO CABEZAS	NK	99	100	99	100	98	98	99	100	99	98	99	99
RIVAS	NK	100	100	100	100	100	100	100	99	100	100	100	100
BOCAS DEL TORO INTL	PM	100	100	100	100	100	100	100	100	100	100	100	100
CHANGUINOLA INTL	PM	100	100	100	100	100	99	100	100	100	100	100	99
DAVID	PM	100	100	100	100	100	100	100	100	100	99	99	100
FORT SHERMAN	PH	100	100	99	99	98	91	95	99	99	99	96	96
HOWARD AFB	PH	100	100	100	100	100	100	100	100	100	100	100	100
JAQUE	PH	100	100	100	100	99	98	98	99	98	100	99	100
LA PALMA	PH	100	100	100	100	100	100	100	100	100	100	100	100
PANAMA CITY	PH	100	100	100	100	100	100	100	100	100	100	99	100
PORVENIR	PH	100	100	100	100	100	100	100	100	100	100	100	100
RIO HATO	PH	100	100	100	100	100	100	100	100	100	100	100	100
SANTIAGO	PH	100	100	100	100	100	100	100	100	100	100	100	100
TOCUMEN	PH	100	100	100	100	100	98	100	100	100	99	100	100

TABLE B-14 Visibility \geq 3 miles: Percent Frequency of Occurrence, Selected Times

		0000Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL		82	98	99	98	100	95	97	99	100	99	99	98	
LIBERIA	CS	100	100	100	100	100	99	97	99	99	99	100	99	100
LIMON	CS	94	98	98	97	98	99	98	97	97	98	99	94	
NICOYA	CS	100	100	100	98	99	98	99	98	96	95	98	100	
PUNTARENAS	CS	99	99	100	99	97	98	100	95	97	97	98	99	
SAN JOSE	CS	99	100	100	99	93	86	93	89	86	82	85	97	
ACAJUTLA	ES	100	99	100	99	96	99	100	99	98	99	100	99	100
SAN SALVADOR	ES	100	100	100	99	98	96	97	98	96	96	99	100	
SANTA ANA	ES	99	100	100	99	99	97	100	100	100	100	98	100	
FLORES	GU	96	98	99	89	85	98	99	100	96	98	99	96	
GUATEMALA CITY	GU	100	99	97	73	77	94	97	92	88	92	99	99	
HUEHUETENANGO	GU	100	100	100	99	92	95	98	97	97	97	99	100	
POPTUN	GU	100	100	100	84	83	100	100	100	99	99	95	95	
PUERTO BARRIOS	GU	96	98	98	92	84	95	96	98	99	99	95	98	
RETALHULEU	GU	100	100	96	86	81	89	86	91	74	74	95	100	
SAN JOSE	GU	100	99	98	75	80	99	98	99	98	98	98	100	
CATACAMAS	HO	99	100	99	92	93	98	98	98	98	98	99	98	
CHOLUTECA	HO	100	100	99	94	87	93	97	97	96	96	100	100	
GUANAJA	HO	98	97	100	98	95	100	98	98	98	98	93	97	
ISLAS DEL CISNE	HO	100	100	100	98	100	99	100	100	99	99	99	99	
LA CEIBA	HO	93	95	97	92	92	92	98	97	97	97	90	92	
PUERTO LEMPIRA	HO	99	96	99	100	98	97	97	98	98	95	89	96	
SAN PEDRO SULA	HO	95	98	97	94	88	93	100	100	99	98	97	96	
TEGUCIGALPA	HO	100	100	99	85	88	92	97	95	96	95	97	96	
TEL A	HO	97	94	97	92	85	93	99	99	98	92	91	93	
BLUEFIELDS	NK	99	98	99	98	99	92	99	96	98	95	96	97	
CHINANDEGA	NK	100	100	100	100	97	92	98	99	99	98	100	100	
JUIGALPA	NK	99	100	99	100	100	96	100	99	98	100	99	100	
MANAGUA	NK	100	100	100	98	99	98	99	97	96	98	100	100	
PUERTO CABEZAS	NK	97	97	98	98	96	96	94	97	95	97	93	90	
RIVAS	NK	100	100	100	100	99	100	100	99	99	99	99	100	
BOCAS DEL TORO INTL	PM	100	100	100	100	100	100	100	99	100	100	100	100	
CHANGUINOLA INTL	PM	99	100	99	99	99	100	99	100	99	100	100	99	
DAVID	PM	100	100	100	98	97	96	97	97	97	95	96	95	
HOWARD AFB	PM	100	100	100	100	100	99	99	100	100	100	99	100	
LA PALMA	PM	100	100	100	100	100	100	100	100	100	100	100	99	
PANAMA CITY	PM	100	100	100	100	99	100	100	100	100	100	100	100	
PORVENIR	PM	100	100	100	100	99	100	100	100	100	100	100	100	
RIO HATO	PM	100	100	100	99	99	100	100	100	100	100	99	100	
SANTIAGO	PM	100	100	100	100	99	99	99	99	99	99	99	100	
TOCUMEN	PM	100	100	100	100	99	99	99	99	100	98	100	100	

TABLE B-14, Cont'd

		0600Z												1200Z												
		JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC												JAN FEB MAR APR MAY JUN JUL AUG SEP OCT NOV DEC												
		BZ	97	98	100	98	97	100	99	99	98	99	94	BZ	87	93	97	96	93	95	93	95	96	98	90	92
SAN JOSE	CS	99	99	100	100	95	94	95	94	95	94	95	99	99	99	98	99	98	99	99	99	99	99	99	99	
ACAJUTLA	ES	99	99	99	96	92	95	97	96	95	96	95	99	99	99	99	99	99	99	99	99	99	99	99	99	
SAN SALVADOR	ES	100	100	100	98	98	96	95	95	96	95	96	99	99	99	99	99	99	99	99	99	99	99	99	99	
GUATEMALA CITY	GU	93	93	88	71	74	85	96	94	87	94	97	97	97	97	97	97	97	97	97	97	97	97	97	97	
HUEHUETENANGO	GU	100	98	100	98	96	100	99	100	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	
PUERTO BARRIOS	GU	99	96	99	92	97	93	97	95	95	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	
SAN JOSE	GU	97	97	100	84	86	96	100	100	99	100	99	100	99	100	99	100	99	100	99	99	99	99	99	99	
CATACAMAS	HO	96	100	100	96	88	94	93	93	94	93	94	93	97	97	97	97	97	97	97	97	97	97	97	97	
CHOLUTECA	HO	100	99	98	95	91	99	98	97	94	97	94	99	99	99	99	99	99	99	99	99	99	99	99	99	
ISLAS DEL CISNE	HO	99	100	99	100	99	100	99	100	99	100	99	100	99	99	99	99	99	99	99	99	99	99	99	99	
SAN PEDRO SULA	HO	95	100	99	91	93	97	98	100	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	
TEGUCIGALPA	HO	99	100	99	90	93	99	100	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	
TEL A	HO	95	94	96	93	87	93	100	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	96	
MANAGUA	NK	100	100	100	99	99	100	99	100	99	100	99	100	99	99	99	100	99	99	99	100	99	99	99	99	
HOWARD AFB	PM	100	100	100	100	100	99	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
TOCUMEN	PH	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
FLORES	GU	76	92	87	82	76	93	86	86	92	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	
GUATEMALA CITY	GU	88	87	79	62	63	85	95	87	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	88	
HUEHUETENANGO	GU	69	71	79	75	61	84	80	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	86	
POPTUN	GU	84	94	96	80	73	93	85	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79	
PUERTO BARRIOS	GU	94	96	96	87	80	96	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	97	
RETALHULEU	GU	100	98	93	55	67	97	100	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	99	
SAN JOSE	GU	86	92	83	58	58	97	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	98	

TABLE B-14, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAMAS	HO	94	98	99	97	91	93	97	94	89	91	95	92
CHOLUTECA	HO	100	100	100	89	81	98	97	97	94	94	99	99
ISLAS DEL CISNE	HO	100	100	100	99	100	100	100	100	99	99	100	100
SAN PEDRO SULA	HO	95	99	95	92	89	95	98	99	99	96	96	94
TEGUCIGALPA	HO	99	99	99	86	86	91	96	93	87	91	95	96
TEL A	HO	97	92	95	94	86	92	100	99	100	92	93	92
BLUEFIELDS	NK	96	99	98	99	98	99	99	95	93	96	92	95
MANAGUA	NK	100	99	100	99	98	99	99	98	98	99	99	100
PUERTO CABEZAS	NK	91	95	97	96	91	91	94	91	94	89	89	91
RIVAS	NK	100	100	99	99	100	98	99	99	99	99	99	100
BOCAS DEL TORO INTL	PH	100	99	100	100	100	99	97	99	99	99	99	100
CHANGUINOLA INTL	PH	97	100	99	99	100	100	100	100	100	100	100	98
DAVID	PH	100	100	99	99	99	100	97	100	98	96	95	100
FORT SHERMAN	PH	100	100	100	99	98	97	98	99	98	98	97	99
HOWARD AFB	PH	100	100	100	100	100	100	100	100	100	100	100	100
PANAMA CITY	PH	100	100	100	100	100	100	100	100	100	100	100	100
PORVENIR	PH	100	100	100	100	100	100	100	100	100	100	100	100
RIO HATO	PH	100	100	100	99	100	100	100	100	100	100	100	100
TOCUMEN	PH	100	99	99	100	99	99	100	99	99	100	99	100
 1800Z													
BELIZE INTL	82	99	100	99	100	95	97	99	99	99	98	97	97
LIBERIA	CS	100	100	100	100	100	98	100	99	100	99	100	100
LIMON	CS	94	96	99	96	98	98	97	96	99	98	97	97
NICOCYA	CS	100	100	100	99	100	99	100	99	100	99	100	99
PUNTARENAS	CS	100	100	100	99	100	100	100	99	98	100	99	100
SAN JOSE	CS	99	100	100	100	100	99	100	100	100	99	99	100
ACAJUTLA	ES	100	99	100	98	95	100	99	100	99	100	100	99
SAN SALVADOR	ES	100	99	100	100	98	96	100	100	96	99	100	100
SANTA ANA	ES	100	98	100	100	100	99	98	100	100	100	100	100
FLORES	GU	99	99	99	93	86	99	99	100	98	99	99	97
GUATEMALA CITY	GU	100	100	100	91	91	99	98	99	96	100	100	100
HUEHUETENANGO	GU	100	100	100	98	95	100	100	100	98	99	98	98
POPTUN	GU	98	100	100	91	91	99	100	97	94	97	100	100
PUERTO BARRIOS	GU	95	96	98	97	93	98	99	100	98	96	98	98
RETALHULEU	GU	98	100	98	88	94	99	100	99	96	96	97	100
SAN JOSE	GU	100	100	98	74	76	98	99	100	97	100	100	100

TABLE B-14, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAMAS	HO	99	100	100	97	97	98	98	99	100	99	99
CHOLUTECA	HO	100	99	99	92	91	98	100	98	98	100	100
GUANAJA	HO	95	94	100	100	96	96	98	97	98	97	95
ISLAS DEL CISNE	HO	100	100	100	99	100	99	100	100	99	100	100
LA CEIBA	HO	92	96	98	91	88	94	100	99	99	96	92
PUERTO LEMPIRA	HO	96	99	99	97	94	99	97	97	97	95	96
SAN PEDRO SULA	HO	100	93	95	85	89	96	100	100	98	95	93
TEGUCIGALPA	HO	100	100	99	89	91	98	99	100	100	98	100
TEL A	HO	92	92	97	93	76	95	99	100	99	93	94
BLUEFIELDS	NK	98	99	98	97	99	96	92	97	97	98	98
CHINANDEGA	NK	100	100	99	99	96	98	99	100	98	97	100
JUIGALPA	NK	100	100	100	99	100	99	99	99	100	99	100
MANAGUA	NK	100	100	100	98	100	99	98	98	100	98	100
PUERTO CABEZAS	NK	98	100	99	99	95	97	98	99	97	96	99
RIVAS	NK	99	99	99	99	99	99	99	100	100	99	100
BOCAS DEL TORO INTL	PH	99	99	100	100	100	100	100	100	100	99	100
CHANGUINOLA INTL	PH	99	100	100	99	100	99	100	100	99	100	100
DAVID	PH	100	100	100	100	100	100	100	100	100	99	100
FORT SHERMAN	PH	100	100	100	98	99	99	98	100	99	100	98
HOWARD AFB	PH	100	100	100	100	100	100	99	99	100	98	98
JAQUE	PH	100	100	100	100	100	100	99	99	98	99	100
LA PALMA	PH	100	100	100	100	100	100	100	100	100	100	100
PANAMA CITY	PH	100	100	100	100	100	100	100	100	100	99	100
PORVENIR	PH	100	100	100	100	100	100	100	100	100	99	100
RIO HATO	PH	100	100	100	100	100	100	100	100	100	100	100
SANTIAGO	PH	100	100	100	100	100	100	100	100	100	100	100
TOCUMEN	PH	100	100	99	99	100	98	99	98	99	99	98

TABLE B-15 Visibility \geq 1 mile: Percent Frequency of Occurrence, Selected Times

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
0000Z	BELIZE INTL	BZ	99	99	99	100	99	99	99	99	100	100	99	100
LIBERIA		CS	100	100	100	100	100	99	99	100	99	100	100	100
LIMON		CS	100	99	100	100	98	100	100	99	100	99	99	99
NICOLYA		CS	100	100	98	100	99	100	100	99	97	100	100	100
PUNTARENAS		CS	99	99	100	100	98	100	100	99	98	99	99	100
SAN JOSE		CS	100	100	100	100	99	94	97	97	93	92	93	100
ACAJUTLA		ES	100	99	100	100	100	99	100	99	99	99	100	100
SAN SALVADOR		ES	100	100	100	100	99	99	100	98	100	99	100	100
SANTA ANA		ES	99	100	100	99	99	99	100	100	100	100	98	100
FLORES		GU	99	100	99	99	97	97	99	99	100	97	99	100
GUATEMALA CITY		GU	100	100	100	98	98	100	98	95	95	99	100	100
HUEHUETENANGO		GU	100	100	100	99	99	99	99	98	93	99	99	100
POPTUN		GU	100	100	100	95	94	100	100	100	100	100	99	100
PUERTO BARRIOS		GU	100	99	99	99	97	97	99	100	100	98	99	99
RETALHULEU		GU	100	100	100	96	97	95	94	96	90	87	96	100
SAN JOSE		GU	100	99	100	99	99	100	100	99	100	99	100	100
CATACAMAS		HO	99	100	100	99	99	100	100	100	100	100	99	100
CHOLUTeca		HO	100	100	100	99	98	99	98	99	98	96	100	100
GUANAJA		HO	100	99	100	100	100	100	100	100	100	100	97	100
ISLAS DEL CISNE		HO	100	100	100	99	100	100	100	100	100	100	99	99
LA CEIBA		HO	98	97	98	96	95	96	96	100	99	96	95	97
PUERTO LEMPIRA		HO	99	99	100	100	100	99	99	100	99	100	97	100
SAN PEDRO SULA		HO	99	99	100	100	99	98	100	100	100	100	99	100
TEGUCIGALPA		HO	100	100	100	95	98	99	99	98	99	100	100	100
TELA		HO	99	99	99	98	92	99	100	99	97	97	98	98
BLUEFIELDS		NK	100	98	99	99	99	100	100	99	100	97	99	100
CHINANDEGA		NK	100	100	100	100	99	98	100	100	99	99	100	100
JUIGALPA		NK	99	100	99	100	100	98	100	100	99	100	99	100
MANAGUA		NK	100	100	100	100	100	99	100	99	98	98	100	100
PUERTO CABEZAS		NK	100	99	100	99	100	99	100	100	99	99	100	100
RIVAS		NK	100	100	100	100	100	100	100	100	100	100	100	100
BOCAS DEL TORO INTL		PH	100	100	100	100	100	100	100	100	100	100	100	100
CHANGINOLA INTL		PH	100	100	100	100	100	100	100	100	100	100	100	100
DAVID		PH	100	100	100	100	100	100	100	100	100	100	100	100
HOWARD AFB		PH	100	100	100	100	100	100	100	100	100	99	100	100
LA PALMA		PH	100	100	100	100	100	100	100	100	100	100	100	100
PANAMA CITY		PH	100	100	100	100	100	100	100	100	100	100	100	100
PORVENIR		PH	100	100	100	100	100	100	100	100	100	100	100	100
RIO HATO		PH	100	100	100	100	100	100	100	100	100	100	100	100
SANTIAGO		PH	100	100	100	100	99	99	99	99	100	100	100	100
TOCUMEN		PH	100	100	100	100	99	99	100	100	100	100	100	100

TABLE B-15, Cont'd

	0600Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	82	100	100	100	100	98	100	99	99	98	99	99	99
SAN JOSE	CS	100	100	100	100	97	96	97	96	97	91	96	99
ACAJUTLA	ES	100	99	100	99	98	99	99	100	100	99	100	100
SAN SALVADOR	ES	100	100	100	100	100	99	97	100	97	98	100	100
GUATEMALA CITY	GU	99	100	99	97	94	97	98	98	95	98	98	97
HUEHUETENANGO	GU	100	100	100	98	96	100	100	100	98	100	99	100
PUERTO BARRIOS	GU	100	100	100	100	100	98	100	100	100	99	100	100
SAN JOSE	GU	97	99	100	100	100	100	100	100	100	100	100	100
CATACAMAS	HO	100	100	100	100	100	99	99	99	108	98	100	100
CHOLUTECA	HO	100	99	99	100	99	100	99	99	100	100	100	100
ISLAS DEL CISNE	HO	100	100	100	100	100	100	100	100	99	99	100	99
SAN PEDRO SULA	HO	99	100	99	99	99	100	99	100	100	100	99	99
TEGUCIGALPA	HO	100	100	99	99	99	100	100	100	100	100	99	100
TELA	HO	98	98	97	100	95	95	100	98	100	97	98	99
MANAGUA	NK	100	100	100	100	100	100	99	100	99	100	100	99
HOWARD AFB	PH	100	00	100	100	100	100	100	100	100	100	100	100
TOCUMEN	PH	100	100	100	100	100	100	100	100	100	100	100	100

	1200Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	82	89	96	99	98	99	98	95	97	98	92	90	94
LIMON	CS	100	99	100	97	99	98	98	99	100	100	99	98
NICOYA	CS	99	100	100	97	94	93	93	87	79	79	92	96
PUNTARENAS	CS	100	100	100	100	100	100	100	99	100	100	100	100
SAN JOSE	CS	100	99	100	100	100	100	99	100	98	97	99	100
ACAJUTLA	ES	100	99	99	100	100	99	99	100	100	99	100	100
SAN SALVADOR	ES	98	99	99	97	93	88	90	87	81	86	95	99
SANTA ANA	ES	100	100	100	100	100	98	96	98	100	100	100	98
FLORES	GU	85	94	92	95	93	96	94	95	95	96	90	89
GUATEMALA CITY	GU	91	91	88	88	85	92	99	94	89	98	90	90
HUEHUETENANGO	GU	72	79	85	89	79	88	88	90	87	89	77	65
POPTUN	GU	90	94	100	89	83	97	89	87	83	73	74	87
PUERTO BARRIOS	GU	99	100	100	95	93	99	98	100	100	99	99	97
RETALHULEU	GU	100	98	100	82	95	98	100	99	100	98	98	100
SAN JOSE	GU	90	95	91	83	87	99	99	99	99	99	94	99

TABLE B-15, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAHAS	HO	95	99	100	99	99	98	100	99	97	97	99	100
CHOLUTeca	HO	100	100	100	98	97	99	98	97	97	97	97	100
ISLAS DEL CISNE	HO	100	100	99	100	100	100	100	100	100	100	100	100
SAN PEDRO SULA	HO	100	99	100	98	98	99	99	99	99	98	99	99
TEGUCIGALPA	HO	100	100	94	97	98	99	98	97	97	98	98	99
TELa	HO	99	97	99	98	91	96	100	99	100	97	96	97
BLUEFIELDS	NK	100	100	99	99	99	100	98	97	98	97	98	95
MANAGUA	NK	100	99	100	100	99	99	99	100	100	97	100	100
PUERTO CABEZAS	NK	99	99	100	100	100	98	98	100	99	99	99	97
RIVAS	NK	100	100	99	100	100	99	100	100	99	99	100	100
BOCAS DEL TORO INTL	PM	100	100	100	100	100	100	99	99	100	99	100	100
CHANGUINOLA INTL	PM	100	100	100	100	100	100	100	100	100	100	100	100
DAVID	PM	100	100	99	100	100	99	100	99	100	99	99	100
FORT SHERMAN	PM	100	100	100	100	100	100	99	99	99	100	100	100
HOWARD AFB	PM	100	100	100	100	100	100	100	100	100	100	100	100
PANAMA CITY	PM	100	100	100	100	100	100	100	100	100	100	100	100
POVENIR	PM	100	100	100	100	100	100	100	100	100	100	100	100
RIO HATO	PM	100	100	100	100	100	100	100	100	100	100	100	100
TOCUMEN	PM	100	100	99	100	100	100	100	100	100	100	100	100
 1800Z													
BELIZE INTL	BZ	99	100	99	100	99	100	99	100	99	100	99	100
LIBERIA	CS	100	100	100	100	100	100	99	100	99	100	100	100
LIMON	CS	98	99	100	99	100	100	98	100	100	99	100	100
NICOCYA	CS	100	100	100	99	100	100	100	100	99	100	99	100
PUNTARENAS	CS	100	100	100	100	100	100	100	100	100	100	100	100
SAN JOSE	CS	100	100	100	100	100	100	100	100	100	100	100	100
ACAJUTLA	ES	100	99	100	100	100	100	100	100	100	99	100	100
SAN SALVADOR	ES	100	99	100	100	100	100	98	100	100	100	99	100
SANTA ANA	ES	100	98	100	100	100	100	100	100	100	100	100	100
FLORES	GU	100	100	100	99	95	100	100	100	100	99	100	99
GUATEMALA CITY	GU	100	100	100	100	99	100	100	100	100	98	100	100
HUEHUETENANGO	GU	100	100	100	100	100	100	100	100	100	100	99	99
POPTUN	GU	98	100	100	97	94	100	100	98	97	98	100	100
PUERTO BARRIOS	GU	100	99	100	100	99	100	100	100	100	98	100	99
RETALHULEU	GU	100	100	100	100	99	100	100	99	97	96	97	100
SAN JOSE	GU	100	100	100	99	100	100	100	100	100	99	100	100

TABLE B-15, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
CATACAMAS	HO	100	100	100	100	99	99	100	100	99	99	100
CHOLUTECA	HO	100	99	100	98	97	99	100	100	99	99	100
GUANAJA	HO	100	99	100	100	98	98	100	100	98	100	98
ISLAS DEL CISNE	HO	100	100	100	99	100	100	100	100	100	99	100
LA CEIBA	HO	97	97	100	96	92	97	100	99	98	96	96
PUERTO LEMPIRA	HO	98	97	100	99	100	105	99	99	98	99	100
SAN PEDRO SULA	HO	100	98	99	98	99	100	100	100	99	100	99
TEGUCIGALPA	HO	100	100	108	97	98	100	100	100	100	99	100
TEL A	HO	99	97	99	100	91	97	100	100	100	97	96
BLUEFIELDS	NK	99	100	100	99	100	99	98	99	99	100	99
CHINANDEGA	NK	100	100	100	99	99	100	100	100	100	100	100
JUIGALPA	NK	100	100	100	100	100	100	100	100	100	100	100
MANAGUA	NK	100	100	100	100	100	100	99	99	100	100	100
PUERTO CABEZAS	NK	100	99	100	99	99	98	100	100	98	99	99
RIVAS	NK	99	99	100	99	99	99	100	100	99	100	100
BOCAS DEL TORO INTL	PM	100	100	100	100	100	100	100	100	100	100	100
CHANGUINOLA INTL	PH	100	100	108	100	100	109	100	100	100	100	100
DAVID	PH	100	100	100	100	100	100	100	100	100	100	100
FORT SHERMAN	PH	100	100	100	100	100	100	100	100	99	100	100
HOWARD AFB	PH	100	100	100	100	100	100	100	100	100	99	100
JAUQUE	PH	100	100	100	100	100	100	100	100	99	100	100
LA PALMA	PH	100	100	100	100	100	100	100	100	100	100	100
PANAMA CITY	PH	100	100	100	100	100	100	100	100	100	100	100
PROVENIR	PH	100	100	100	100	100	100	100	100	100	100	100
RIO HATO	PH	100	100	108	100	100	100	100	100	100	100	100
SANTIAGO	PH	100	100	100	100	100	100	100	100	100	100	100
TOCUMEN	PH	100	100	100	100	100	100	98	100	100	99	100

TABLE B-16 SKY COVER \leq 3/10: Percent Frequency of Occurrence, Selected Times

0000 LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
18.00N	92.00W	46	36	47	40	43	11	20	14	18	34	45
18.00N	90.00W	48	43	43	46	32	11	23	23	28	43	52
18.00N	88.00W	52	59	60	58	33	18	28	29	25	32	47
18.00N	84.00W	50	56	63	45	35	22	22	22	24	27	49
18.00N	81.00W	57	33	60	50	39	39	35	32	20	35	50
17.00N	91.00W	49	29	40	34	29	11	13	12	18	39	44
17.00N	89.00W	44	33	43	40	23	13	19	20	17	25	32
17.00N	87.00W	49	42	74	55	37	20	22	29	20	21	32
17.00N	85.00W	54	44	56	58	37	20	23	31	22	29	42
17.00N	84.00W	56	44	57	53	30	17	22	20	27	28	36
16.00N	92.00W	49	31	50	44	24	9	10	6	3	14	30
16.00N	90.00W	56	36	42	43	27	16	16	16	18	34	51
16.00N	88.00W	37	20	42	27	15	6	4	6	4	8	17
16.00N	86.00W	54	40	51	37	28	17	19	27	17	29	32
16.00N	84.00W	49	31	55	40	30	16	11	25	15	20	37
16.00N	82.00W	59	33	63	48	43	39	25	27	24	21	41
15.00N	93.00W	53	44	56	47	11	2	8	2	3	10	56
15.00N	91.00W	62	58	55	58	17	6	12	8	7	23	50
15.00N	89.00W	51	44	46	24	25	8	10	10	9	24	32
15.00N	87.00W	34	24	33	39	12	7	12	12	3	20	39
15.00N	85.00W	46	25	34	24	19	9	10	15	12	25	36
15.00N	83.00W	59	40	65	37	38	11	12	16	18	26	43
15.00N	81.00W	64	58	68	40	35	24	24	25	21	24	50
14.00N	93.00W	87	71	68	31	26	10	18	12	12	23	61
14.00N	92.00W	81	57	57	27	15	7	18	8	9	16	54
14.00N	90.00W	74	68	56	30	7	3	7	6	1	18	31
14.00N	88.00W	64	64	66	26	14	6	15	13	10	20	43
14.00N	86.00W	49	25	45	23	18	7	6	9	15	29	37
14.00N	84.00W	60	59	49	19	10	14	16	16	17	20	36
14.00N	82.00W	66	51	69	36	32	17	13	19	16	22	39
13.00N	91.00W	69	70	69	34	17	9	16	15	13	25	53
13.00N	89.00W	77	53	57	28	14	4	12	4	2	40	42
13.00N	87.00W	66	76	68	43	12	5	10	20	7	13	37
13.00N	85.00W	54	60	56	26	29	13	12	13	12	19	20
13.00N	83.00W	59	49	65	29	27	12	10	13	15	14	44
12.00N	86.00W	78	69	73	40	17	5	21	13	8	14	46
12.00N	84.00W	67	52	54	28	29	20	13	19	17	32	48
12.00N	81.00W	46	41	61	31	32	10	14	7	12	16	35
12.00N	79.00W	58	48	55	27	18	10	6	12	17	24	38
12.00N	77.00W	72	48	51	32	26	13	10	18	13	9	57
11.00N	91.00W	88	73	78	56	34	8	19	16	19	27	58
11.00N	89.00W	63	67	67	40	23	18	7	5	5	11	41
11.00N	87.00W	81	64	75	46	33	12	18	13	10	21	59
11.00N	85.00W	61	50	51	28	22	6	15	8	8	15	49
11.00N	83.00W	51	40	42	25	19	5	4	5	6	9	17
11.00N	81.00W	67	46	40	23	18	7	5	5	11	8	20
11.00N	79.00W	72	42	34	16	17	12	8	13	10	14	42
11.00N	77.00W	71	63	56	21	18	13	10	17	11	15	53
10.00N	89.00W	85	63	76	46	31	10	17	16	11	17	51

TABLE B-16, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
10.00N	86.00W	76	64	57	32	15	3	4	3	3	2	24
10.00N	84.00W	62	61	54	36	24	11	14	7	8	10	23
10.00N	82.00W	44	21	23	14	8	5	0	6	6	7	13
10.00N	80.00W	61	39	36	23	17	7	6	5	4	4	12
10.00N	78.00W	62	42	24	12	10	6	13	15	6	3	22
9.00N	91.00W	83	58	74	49	24	4	20	20	12	19	42
9.00N	87.00W	79	61	53	29	23	6	9	5	10	16	30
9.00N	85.00W	68	46	49	16	3	5	4	1	6	4	15
9.00N	83.00W	48	37	30	15	10	4	7	2	0	6	10
9.00N	81.00W	22	5	11	4	2	0	2	1	3	4	12
9.00N	79.00W	63	59	47	26	13	10	13	11	6	10	14
9.00N	77.00W	61	29	24	8	4	6	9	6	4	2	11
8.00N	84.00W	51	24	27	11	10	2	8	2	1	2	10
8.00N	82.00W	66	39	40	17	8	4	2	3	1	0	4
8.00N	80.00W	71	93	53	20	5	3	2	0	2	4	11
8.00N	78.00W	44	25	32	12	0	2	6	3	2	2	7
7.00N	86.00W	52	37	37	14	8	8	2	8	8	11	26
7.00N	84.00W	65	40	46	21	10	5	3	4	2	1	10
7.00N	79.00W	50	22	34	17	8	3	3	1	7	5	11
6.00N	84.00W	53	29	30	14	6	1	5	5	6	8	10
6.00N	82.00W	53	30	25	17	14	6	6	4	8	7	11
6.00N	80.00W	38	25	37	23	15	8	7	6	8	10	13
6.00N	78.00W	31	21	22	9	5	2	1	1	2	4	12

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
18.00N	92.00W	43	44	55	50	40	10	35	29	31	26	41
18.00N	90.00W	47	43	48	57	37	12	31	31	33	37	40
18.00N	68.00W	40	21	52	39	25	7	16	9	13	19	33
18.00N	64.00W	66	50	56	69	34	38	39	45	37	46	48
18.00N	61.00W	67	53	53	56	48	45	40	51	40	46	58
17.00N	91.00W	40	26	43	52	35	12	30	29	31	31	39
17.00N	89.00W	34	19	36	37	25	10	22	13	20	14	26
17.00N	87.00W	56	52	71	60	44	30	32	29	33	35	45
17.00N	85.00W	66	53	69	59	46	35	41	37	32	33	50
17.00N	84.00W	42	40	49	30	19	17	22	22	20	34	20
16.00N	92.00W	49	42	60	52	27	4	24	14	7	23	27
16.00N	90.00W	41	35	46	43	37	10	23	17	22	24	34
16.00N	88.00W	33	22	45	33	22	10	12	8	8	12	9
16.00N	86.00W	44	36	47	46	26	18	20	22	30	37	20
16.00N	84.00W	59	45	60	47	34	20	18	35	30	31	37
16.00N	82.00W	68	60	65	57	45	30	29	45	43	52	46
15.00N	93.00W	67	75	70	54	28	20	20	24	22	41	61
15.00N	91.00W	65	67	67	53	27	3	15	13	6	22	46
15.00N	89.00W	30	34	42	32	22	8	15	13	18	22	19
15.00N	87.00W	23	10	33	23	13	2	5	6	2	21	14
15.00N	85.00W	32	26	33	20	14	1	13	11	20	27	24
15.00N	83.00W	60	52	58	45	43	20	25	37	29	30	38
15.00N	81.00W	74	68	67	56	42	36	37	40	41	41	55

TABLE B-16, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
93.00W	91	80	75	59	30	19	19	23	21	51	69	78
92.00W	92	87	77	53	33	18	20	23	22	36	67	69
90.00W	73	56	53	27	6	10	25	22	10	28	41	41
88.00W	67	63	61	44	18	7	32	25	12	29	56	56
86.00W	25	9	31	12	15	5	18	7	13	25	19	18
84.00W	36	20	26	20	12	3	13	8	14	23	23	18
82.00W	67	59	61	46	34	24	27	25	33	37	40	43
91.00W	87	85	73	52	29	22	19	26	19	25	60	74
89.00W	89	77	67	53	23	21	31	29	11	34	57	61
87.00W	75	58	56	41	9	3	19	10	9	22	41	44
85.00W	30	22	30	17	20	3	11	16	21	16	27	20
83.00W	63	52	56	44	30	19	20	21	22	27	32	45
81.00W	80	67	54	43	21	12	19	25	23	28	36	43
93.00W	86	71	74	53	38	16	19	16	21	43	60	70
90.00W	94	79	70	62	24	16	29	28	17	34	57	61
88.00W	94	86	86	60	28	21	38	31	28	35	57	60
86.00W	24	25	27	13	1	1	5	0	1	4	5	7
84.00W	7	1	3	3	6	1	5	4	4	14	9	10
82.00W	69	66	60	47	36	12	19	25	19	22	40	47
80.00W	75	60	57	44	37	14	19	22	18	24	32	47
91.00W	90	80	78	54	40	17	22	27	18	39	51	55
89.00W	90	83	86	52	31	22	28	26	22	34	57	79
87.00W	93	82	82	68	33	17	34	33	34	37	55	77
85.00W	36	34	27	9	7	0	3	4	0	3	8	21
83.00W	67	41	55	37	34	4	9	13	14	24	43	43
81.00W	75	64	54	44	33	8	16	15	16	14	24	46
79.00W	86	47	57	33	23	11	9	20	16	16	29	58
77.00W	80	44	59	26	16	19	29	25	16	22	36	48
89.00W	92	82	87	62	38	20	23	26	26	34	50	74
86.00W	93	78	82	51	33	13	20	12	19	22	35	59
84.00W	44	28	30	10	5	1	2	1	0	1	4	22
82.00W	27	14	13	9	8	2	3	5	6	2	5	18
80.00W	81	49	48	29	22	10	10	20	10	15	20	43
78.00W	75	41	40	26	19	11	10	10	10	11	22	51
91.00W	89	79	83	54	42	13	19	22	26	38	52	70
87.00W	90	68	66	38	30	9	17	23	18	27	38	67
85.00W	83	60	67	40	15	10	13	8	19	21	30	49
83.00W	23	6	6	1	0	5	2	2	1	2	2	4
81.00W	28	13	18	7	13	7	4	12	16	11	22	23
79.00W	9	4	8	3	1	0	3	1	0	1	2	5
77.00W	69	34	31	22	15	7	10	10	10	10	16	40
84.00W	66	56	36	22	14	8	12	14	10	10	9	43
82.00W	79	65	45	32	14	3	2	2	3	3	3	25
80.00W	55	23	27	13	3	2	0	10	5	4	5	8
78.00W	27	12	15	6	4	0	12	13	12	17	22	38
86.00W	61	51	44	24	16	12	13	12	17	17	23	43
81.00W	76	60	46	39	16	15	14	15	9	7	11	44
79.00W	58	40	42	30	16	8	6	6	7	6	7	48
84.00W	56	39	32	19	11	6	17	14	13	16	14	50
82.00W	68	45	33	26	20	8	11	9	11	16	11	32
80.00W	51	38	43	28	18	8	11	9	10	11	11	25
76.00W	29	13	13	6	12	0	0	0	0	0	0	3

TABLE 8-17 Sky Cover \geq 6/10: Percent Frequency of Occurrence, Selected Times

0000 LST	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
18.00N	92.00W	52	59	46	53	50	87	82	73	62	48	46
18.00N	90.00W	49	52	50	50	66	88	75	70	75	67	51
18.00N	88.00W	36	38	33	34	54	70	70	55	66	61	55
18.00N	84.00W	41	53	29	45	57	70	67	73	70	66	51
18.00N	81.00W	34	63	28	40	57	57	62	60	72	59	44
17.00N	91.00W	45	66	57	60	66	87	84	85	87	72	51
17.00N	89.00W	51	65	52	56	70	81	77	74	78	72	61
17.00N	87.00W	46	51	32	39	60	73	74	65	76	69	59
17.00N	85.00W	41	49	29	38	58	74	70	65	74	64	52
17.00N	84.00W	40	46	26	38	58	71	66	69	66	65	46
16.00N	92.00W	45	55	40	58	67	82	82	91	92	78	64
16.00N	90.00W	41	58	57	53	69	84	75	79	80	77	60
16.00N	88.00W	55	74	53	64	77	90	86	87	88	86	77
16.00N	86.00W	40	48	41	54	69	78	71	61	74	67	60
16.00N	84.00W	44	60	34	49	66	79	70	71	80	74	58
16.00N	82.00W	32	57	26	48	50	76	66	70	71	70	52
15.00N	93.00W	34	40	36	71	84	93	87	93	97	83	39
15.00N	91.00W	29	33	28	60	70	89	84	89	93	71	55
15.00N	89.00W	44	43	46	64	67	90	87	87	90	72	62
15.00N	87.00W	57	64	52	72	82	92	87	83	92	75	63
15.00N	85.00W	45	67	56	71	75	87	86	83	86	71	61
15.00N	83.00W	34	51	29	53	54	87	83	80	77	68	51
15.00N	81.00W	29	37	20	49	58	70	74	70	77	74	41
14.00N	93.00W	10	19	27	59	70	90	90	86	83	70	26
14.00N	92.00W	17	36	38	63	83	92	80	91	90	81	45
14.00N	90.00W	23	19	31	58	85	96	87	92	92	73	50
14.00N	88.00W	28	21	27	67	80	91	83	83	85	76	49
14.00N	86.00W	46	57	46	68	80	89	92	90	90	77	64
14.00N	84.00W	37	37	29	60	75	87	84	79	80	74	56
14.00N	82.00W	30	43	22	58	64	82	84	74	79	71	44
14.00N	91.00W	5	24	18	57	78	89	81	83	83	71	4C
13.00N	89.00W	18	37	32	67	83	93	83	87	92	86	53
13.00N	87.00W	26	18	26	47	79	85	84	84	86	80	51
13.00N	85.00W	45	32	40	68	68	84	89	85	86	75	70
13.00N	83.00W	36	42	31	63	69	84	85	84	82	81	64
13.00N	81.00W	28	40	30	59	66	78	82	84	84	80	68
12.00N	93.00W	8	18	17	44	57	70	66	72	86	84	87
12.00N	90.00W	14	23	25	56	70	84	74	83	87	86	82
12.00N	88.00W	16	19	22	58	78	94	74	66	84	81	71
12.00N	86.00W	20	25	18	43	63	89	82	85	87	82	70
12.00N	84.00W	46	44	32	57	70	86	84	85	87	82	67
12.00N	82.00W	28	41	35	65	72	86	87	86	87	88	60
11.00N	80.00W	14	27	18	49	74	86	74	73	91	82	69
11.00N	78.00W	34	41	38	60	73	86	77	77	82	83	62
11.00N	76.00W	61	62	52	69	74	81	94	95	92	88	78
11.00N	74.00W	28	44	56	68	78	88	94	88	86	91	76
11.00N	72.00W	17	50	59	80	77	84	86	84	89	89	65
11.00N	70.00W	23	36	40	56	68	78	88	84	86	84	62

TABLE B-17, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
10.00N	89.00W	13	30	17	47	65	89	80	82	70	43	23
10.00N	86.00W	23	26	31	62	85	96	97	97	96	67	41
10.00N	84.00W	34	38	42	58	69	76	74	87	87	72	50
10.00N	82.00W	51	73	70	79	89	92	100	90	92	82	59
10.00N	80.00W	30	52	56	72	83	89	92	91	93	84	54
10.00N	78.00W	31	54	62	82	87	92	84	82	94	96	49
9.00N	91.00W	15	32	15	49	66	89	79	75	81	75	52
9.00N	87.00W	20	36	44	69	75	91	89	86	82	64	39
9.00N	85.00W	28	45	49	79	92	93	92	96	93	95	78
9.00N	83.00W	45	58	61	77	83	89	91	92	99	94	63
9.00N	81.00W	66	89	82	94	94	97	100	97	98	97	83
9.00N	79.00W	29	30	41	66	82	88	80	86	88	85	74
9.00N	77.00W	33	65	71	91	92	90	91	91	94	97	87
8.00N	84.00W	43	56	67	88	89	94	90	98	97	97	86
8.00N	82.00W	24	45	55	76	87	98	96	97	98	100	92
8.00N	80.00W	24	49	44	76	94	97	96	97	96	92	87
8.00N	78.00W	48	63	62	87	99	97	91	94	98	96	86
7.00N	86.00W	45	57	59	82	92	90	95	96	92	87	70
7.00N	81.00W	28	52	49	76	88	91	94	96	97	89	70
7.00N	79.00W	45	70	61	80	92	96	97	98	92	94	88
6.00N	84.00W	41	62	62	85	90	94	91	94	93	85	79
6.00N	82.00W	43	63	59	80	82	93	95	91	89	92	87
6.00N	80.00W	60	70	57	73	83	87	92	94	90	88	76
6.00N	78.00W	67	75	72	86	92	97	96	98	97	91	85

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
18.00N	92.00W	53	51	44	46	56	89	60	67	68	68	51
18.00N	90.00W	49	55	48	41	61	86	63	67	64	57	57
18.00N	88.00W	43	47	29	42	66	80	66	75	74	75	58
18.00N	84.00W	28	44	33	38	57	56	52	46	54	48	50
18.00N	81.00W	24	44	28	39	47	51	54	42	46	34	
17.00N	91.00W	58	70	56	42	61	68	67	68	66	57	58
17.00N	89.00W	63	78	63	57	73	88	75	82	77	78	66
17.00N	87.00W	40	39	27	36	53	64	62	66	58	63	60
17.00N	85.00W	28	38	26	37	46	58	55	56	61	52	58
17.00N	84.00W	42	51	37	59	66	77	65	64	72	65	70
16.00N	92.00W	41	47	31	34	64	65	60	74	82	69	65
16.00N	90.00W	57	64	53	56	60	88	73	76	73	66	56
16.00N	88.00W	59	70	44	53	61	78	74	78	80	75	67
16.00N	86.00W	54	61	45	51	63	81	68	69	61	58	73
16.00N	84.00W	33	45	32	48	58	73	71	61	62	61	57
16.00N	82.00W	26	33	30	41	51	63	58	46	54	44	41
16.00N	93.00W	9	23	24	38	70	79	75	69	73	47	31
15.00N	91.00W	25	45	24	32	70	92	79	85	89	77	66
15.00N	89.00W	65	62	50	51	71	89	64	84	77	72	68
15.00N	87.00W	72	86	55	69	77	96	83	91	94	93	78
15.00N	85.00W	67	73	67	79	82	97	82	85	75	70	69
15.00N	83.00W	33	38	36	49	52	77	66	59	64	56	53
15.00N	81.00W	23	26	25	38	53	59	61	57	51	52	47

TABLE B-17, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
14.00N 93.00W	7	17	16	33	69	81	80	74	72	43	27	20
14.00N 92.00W	4	16	19	41	55	79	78	76	71	59	27	26
14.00N 90.00W	16	35	29	58	79	90	86	93	84	57	42	
14.00N 88.00W	22	30	31	47	72	86	61	66	81	58	50	32
14.00N 86.00W	74	88	63	79	73	93	82	87	83	72	77	80
14.00N 84.00W	57	79	64	79	87	94	81	85	78	71	71	
14.00N 82.00W	25	31	29	56	57	72	68	73	65	53	53	46
13.00N 91.00W	9	14	24	46	69	72	71	77	59	34	19	
13.00N 89.00W	9	21	30	40	72	73	62	65	74	60	39	22
13.00N 87.00W	13	30	32	39	82	93	68	78	82	63	49	38
13.00N 85.00W	68	76	68	82	76	96	85	77	78	80	69	75
13.00N 83.00W	29	39	53	66	78	77	76	74	66	57	48	
13.00N 81.00W	12	25	35	40	54	75	59	57	66	62	49	38
12.00N 93.00W	10	24	23	42	59	82	76	84	76	48	37	26
12.00N 90.00W	1	19	21	54	69	81	70	66	60	65	37	17
12.00N 88.00W	5	14	11	38	70	79	61	66	69	60	34	14
12.00N 86.00W	52	57	54	74	66	96	94	98	97	88	87	79
12.00N 84.00W	88	93	86	85	87	98	94	91	82	86	84	83
12.00N 82.00W	23	31	32	49	57	82	75	79	78	68	61	45
12.00N 80.00W	19	36	40	53	55	83	77	70	73	74	58	32
11.00N 91.00W	6	17	19	40	59	82	72	71	79	58	43	22
11.00N 89.00W	7	15	11	46	63	76	68	72	63	41	18	
11.00N 87.00W	5	17	14	30	66	80	62	65	60	59	38	23
11.00N 85.00W	56	60	59	82	87	99	93	95	98	94	88	69
11.00N 83.00W	27	45	41	58	61	93	89	86	89	82	72	53
11.00N 81.00W	22	31	40	52	62	89	77	80	82	81	72	44
11.00N 79.00W	9	42	35	63	74	88	88	74	81	79	64	33
11.00N 77.00W	14	51	31	69	75	87	75	67	63	62	44	
10.00N 89.00W	6	17	11	38	53	80	75	70	72	74	43	19
10.00N 86.00W	5	17	16	38	62	79	75	81	79	74	56	26
10.00N 84.00W	54	60	63	84	88	97	96	97	98	96	91	73
10.00N 82.00W	61	73	80	87	84	98	96	93	91	95	81	76
10.00N 80.00W	18	42	40	66	79	87	87	77	89	84	74	49
10.00N 78.00W	16	52	51	68	75	87	85	81	91	87	78	42
9.00N 91.00W	8	20	15	46	54	83	79	74	63	59	46	24
9.00N 87.00W	10	32	31	61	68	88	81	70	76	69	54	25
9.00N 85.00W	14	19	29	58	79	91	86	89	87	83	82	63
9.00N 83.00W	67	86	85	98	98	100	96	97	96	96	93	90
9.00N 81.00W	65	82	79	87	85	92	95	96	94	97	96	90
9.00N 79.00W	58	79	82	86	91	96	96	94	99	96	97	73
9.00N 77.00W	28	61	63	71	80	87	84	83	82	84	83	77
8.00N 85.00W	26	41	60	76	83	91	85	89	87	83	76	49
8.00N 83.00W	67	86	85	98	98	100	96	94	94	94	93	90
8.00N 80.00W	17	30	52	61	81	90	85	83	84	84	84	66
8.00N 78.00W	29	52	52	74	89	96	94	97	96	90	90	62
8.00N 76.00W	58	79	82	86	91	96	96	94	97	95	86	71
7.00N 86.00W	36	44	51	73	80	84	82	83	82	83	78	58
7.00N 84.00W	26	41	60	76	83	91	85	89	87	83	83	53
7.00N 82.00W	19	38	46	60	81	91	86	94	87	94	93	73
7.00N 79.00W	37	58	55	64	83	91	91	92	92	94	90	
6.00N 84.00W	38	55	66	80	86	92	79	85	83	84	84	45
6.00N 82.00W	76	54	58	71	74	90	87	86	87	86	84	62
6.00N 80.00W	44	59	47	69	77	89	90	88	86	84	83	73
6.00N 78.00W	65	84	81	87	93	96	95	94	92	88	80	

TABLE B-18 Days Favorable for Personnel Parachute Operations (Ceiling \geq 1,500 ft,
Visibility > 3 mi, Wind speed \leq 13 kts), Selected Times

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0000Z	NELIZE INTL	BZ	29	27	29	28	28	27	28	30	30	29	29
LIBERIA	CS	19	13	21	18	28	27	27	29	30	30	28	26
LIMON	CS	28	27	30	28	30	29	30	29	30	28	29	29
NICOYA	CS	27	24	27	27	30	29	30	30	28	29	29	31
PUNTARENAS	CS	30	27	31	29	30	29	30	29	29	29	29	31
SAN JOSE	CS	10	8	14	15	25	22	22	22	22	22	20	18
ACAJUTLA	ES	30	27	30	29	30	30	30	30	28	30	29	31
SAN SALVADOR	ES	28	25	28	28	29	29	29	30	30	30	28	29
SANTA ANA	ES	30	28	30	29	30	28	30	31	30	31	29	31
FLORES	GU	27	27	30	26	26	29	30	31	28	29	28	27
GUATEMALA CITY	GU	22	17	22	14	21	25	24	23	21	25	22	21
HUEHUETENANGO	GU	28	23	26	24	27	26	27	26	27	29	28	30
POPTUN	GU	29	26	30	25	24	29	29	31	27	27	25	29
PUERTO BARRIOS	GU	28	25	29	25	25	26	26	26	28	28	26	27
RETALHULEU	GU	31	28	29	26	25	26	26	26	21	22	28	31
SAN JOSE	GU	30	28	30	22	25	28	30	30	29	29	29	31
CATACAMAS	HO	29	27	30	25	25	27	29	29	29	30	29	29
CHOLULTECA	HO	29	25	29	25	25	27	29	30	28	28	29	28
GUANAJA	HO	19	17	7	16	13	10	14	13	16	23	24	21
ISLAS DEL CISNE	HO	24	23	22	22	23	23	26	26	26	26	26	25
LA CEIBA	HO	28	26	28	24	27	23	24	27	28	27	27	26
PUERTO LEMPIRA	HO	29	25	28	28	28	28	27	27	27	27	23	26
SAN PEDRO SULA	HO	28	26	27	26	26	26	26	26	29	29	28	29
TEGUCIGALPA	HO	29	24	29	24	27	26	27	26	28	28	28	29
TELA	HO	29	25	28	27	26	25	29	30	29	28	27	28
BLUEFIELD	HK	28	26	28	28	29	29	24	27	26	28	29	28
CHINANDEGA	HK	27	27	29	28	29	27	30	30	29	30	29	30
JUIGALPA	HK	30	28	31	29	31	28	29	29	30	29	29	30
MANAGUA	HK	29	26	30	27	29	26	26	21	26	27	27	24
PUERTO CABEZAS	HK	24	24	25	22	26	26	26	26	29	29	30	29
RIVAS	HK	24	24	28	29	30	27	29	30	29	30	28	29
BOCAS DEL TORO INTL	PH	30	27	30	29	30	29	30	31	30	30	29	31
CHANGUINOLA INTL	PH	30	28	31	29	31	30	30	31	30	31	29	30
DAVID	PH	25	20	25	28	29	26	28	26	25	27	26	30
HOWARD AFB	PH	31	28	31	30	31	30	30	31	30	30	30	31
LA PALMA	PH	30	28	30	30	30	29	31	31	30	30	29	31
PANAMA CITY	PH	28	22	25	24	26	29	29	30	30	30	28	31
PORVENIR	PH	16	16	21	23	29	27	29	30	27	28	26	23
RIO HATO	PH	21	12	12	17	27	29	28	29	30	29	28	28
SANTIAGO	PH	21	14	16	20	27	29	30	30	30	29	29	30
TOCUMEN	PH	29	25	27	27	29	29	30	30	29	29	29	31

TABLE B-18, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
0600Z	BELIZE INTL	BZ	29	26	29	27	30	28	26	30	27	27	26	27
SAN JOSE	CS	I2	10	15	18	26	26	24	24	26	25	24	19	
ACAJUTLA	ES	30	27	30	28	28	29	30	29	29	30	29	30	
SAN SALVADOR	ES	29	26	30	29	30	28	29	29	28	28	29	30	
GUATEMALA CITY	GU	18	17	20	16	20	17	18	17	16	20	16	18	
HUEHUETENANGO	GU	31	26	31	29	30	29	30	29	29	29	29	31	
PUERTO BARRIOS	GU	28	25	29	26	30	27	29	29	28	27	26	27	
SAN JOSE	GU	30	27	31	25	26	26	29	31	29	30	29	29	
CATACAMAS	HO	29	28	31	29	27	28	30	28	28	28	29	29	
CHOLUTECA	HO	25	24	29	26	28	28	30	30	27	30	28	29	
ISLAS DEL CISNE	HO	24	22	22	22	22	22	29	29	25	29	27	25	
SAN PEDRO SULA	HO	29	28	30	27	28	28	30	31	29	30	29	29	
TEGUCIGALPA	HO	30	27	30	27	29	29	30	30	29	30	28	30	
TEL A	HO	28	25	29	29	27	28	30	30	30	27	28	29	
HANAGUA	NK	31	28	30	29	30	30	30	31	30	30	29	31	
HOWARD AFB	PH	31	28	31	30	31	30	31	31	30	30	30	31	
TOCUMEN	PH	31	28	31	29	30	29	31	30	29	30	30	31	

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	
1200Z	BELIZE INTL	BZ	25	22	28	27	29	25	28	26	25	23	23	26
LIMON	CS	28	25	30	27	29	26	29	30	30	30	28	26	
NICOYA	CS	29	26	30	28	28	27	28	25	25	21	22	29	
PUNTARENAS	CS	31	28	31	30	30	30	30	30	29	30	29	31	
SAN JOSE	CS	11	12	15	17	17	27	25	23	25	27	26	20	
ACAJUTLA	ES	30	27	31	29	30	30	30	30	30	30	29	31	
SAN SALVADOR	ES	29	26	29	27	27	24	26	25	25	22	24	29	
SANTA ANA	ES	30	28	30	30	30	27	30	29	27	31	30	30	
FLORES	GU	14	18	23	22	20	24	23	19	20	14	15	15	
GUATEMALA CITY	GU	17	16	16	13	17	20	21	19	19	22	19	19	
HUEHUETENANGO	GU	19	18	24	22	18	23	22	22	22	20	22	16	
POPTUN	GU	21	23	26	20	20	27	25	23	23	20	14	22	
PUERTO BARRIOS	GU	24	23	27	24	24	26	28	27	28	27	24	24	
RETALHULEU	GU	31	27	29	16	20	28	30	30	29	30	29	31	
SAN JOSE	GU	26	26	26	17	18	29	30	30	29	30	28	27	
CATACAMAS	HO	27	26	30	29	27	26	29	29	27	27	26	28	
CHOLUTECA	HO	25	22	28	24	24	29	29	30	27	29	28	27	
ISLAS DEL CISNE	HO	25	23	22	22	22	22	27	26	26	28	26	25	
SAN PEDRO SULA	HO	28	27	29	27	28	28	28	30	30	30	29	27	
TEGUCIGALPA	HO	29	26	30	25	26	27	26	28	25	27	27	27	
TEL A	HO	29	25	29	28	27	28	30	31	30	28	28	28	

TABLE B-18, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BLUEFIELDS	NK	25	25	28	28	27	26	26	26	29	26	27	27
MANAGUA	NK	30	27	31	29	30	30	30	29	30	29	31	31
PUERTO CABEZAS	NK	23	23	25	24	24	21	19	26	26	27	26	26
RIVAS	NK	20	21	28	26	31	28	26	29	29	30	29	27
BOCAS DEL TORO INTL	PH	30	27	30	30	30	29	30	30	30	30	28	30
CHANGUINOLA INTL	PH	30	28	30	29	31	30	30	31	30	30	29	30
DAVID	PH	30	27	29	29	30	30	30	30	30	28	27	31
FORT SHERMAN	PH	27	25	29	25	27	21	22	20	25	26	22	26
HOWARD AFB	PH	31	28	31	30	30	30	30	30	30	31	29	31
PANAMA CITY	PH	30	27	31	30	30	29	31	30	29	30	29	31
PORVENIR	PH	14	11	16	18	25	26	26	28	26	28	22	15
RIO HATO	PH	29	26	30	29	30	30	31	30	31	34	29	31
TOCUMEN	PH	31	27	31	27	30	29	30	30	30	30	29	31
1800Z													
BELIZE INTL	82	29	24	27	26	25	23	25	26	28	27	26	25
LIBERIA	CS	13	13	10	13	23	24	21	24	27	28	26	16
LIMON	CS	28	26	29	27	30	29	29	29	29	28	28	28
NICOYA	CS	23	23	26	27	30	29	30	30	29	29	28	27
PUNTARENAS	CS	29	26	30	29	30	29	31	30	29	29	30	30
SAN JOSE	CS	4	4	7	10	20	20	17	19	20	23	19	10
ACAJUTLA	ES	30	27	30	27	29	29	30	30	30	30	30	29
SAN SALVADOR	ES	26	24	29	29	29	28	30	30	27	29	25	27
SANTA ANA	ES	31	26	30	29	31	29	30	31	30	30	29	30
FLORES	GU	27	24	29	27	26	29	30	30	29	28	26	26
GUATEMALA CITY	GU	19	17	24	21	24	26	25	25	25	24	20	19
HUEHUETENANGO	GU	28	26	29	27	29	28	28	28	29	28	27	26
POPTUN	GU	25	24	23	23	27	25	25	27	25	21	26	26
PUERTO BARRIOS	GU	26	24	26	25	25	27	26	29	29	28	27	26
RETALHULEU	GU	30	27	30	26	28	28	30	30	29	27	30	31
SAN JOSE	GU	30	27	28	21	22	28	30	30	28	29	29	30
CATACAMAS	HO	30	26	28	26	29	28	27	29	30	29	28	29
CHOLUTECA	HO	23	22	26	20	27	29	29	30	29	29	24	22
GUANAJA	HO	23	21	24	23	23	22	26	26	27	27	24	23
ISLAS DEL CISNE	HO	22	20	18	19	19	20	23	27	25	27	26	24
LA CEIBA	HO	28	26	30	25	27	29	29	29	27	27	27	29
PUERTO LEMPIRA	HO	26	23	30	27	28	27	28	27	28	24	24	26
SAN PEDRO SULA	HO	30	25	29	25	27	29	31	31	30	28	28	29
TEGUCIGALPA	HO	25	22	26	25	27	28	28	29	28	27	22	25
TELA	HO	27	25	29	27	23	28	29	30	30	29	27	26
BLUEFIELDS	NK	23	23	23	26	28	23	24	24	24	26	23	24
CHINANDEGA	NK	23	22	25	27	28	28	29	30	29	29	28	28
JUIGALPA	NK	28	27	30	28	31	29	30	30	29	30	28	28
MANAGUA	NK	22	21	23	24	28	28	26	29	29	29	29	27
PUERTO CABEZAS	NK	22	21	22	21	21	26	18	16	23	25	24	24
RIVAS	NK	18	15	22	23	30	27	24	26	28	27	26	27

TABLE B-18, Cont'd

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BOCAS DEL TORO INTL	PH	30	27	30	29	30	29	30	30	29	29	28
CHANGUINOLA INTL	PH	30	27	30	29	30	29	30	30	29	29	29
DAVID	PH	22	19	25	25	25	29	29	30	29	28	27
FORT SHERMAN	PH	30	27	29	27	27	22	22	23	25	26	24
HOWARD AFB	PH	28	23	25	28	30	29	30	30	29	29	28
JAQUE	PH	30	27	30	30	30	29	30	30	29	29	30
LA PALMA	PH	30	27	30	29	31	29	31	31	29	29	30
PANAMA CITY	PH	25	22	23	26	30	29	30	30	28	28	29
PORVENIR	PH	14	14	18	21	26	27	29	30	27	26	25
RIO HATO	PH	18	17	19	23	30	29	28	30	29	30	28
SANTIAGO	PH	21	21	23	23	30	29	31	30	29	29	29
TOCUMEN	PH	20	17	20	21	26	28	29	29	27	27	26

TABLE B-19 Days Favorable for Equipment Parachute Operations (Ceiling \geq 1,500 ft.
Visibility $>$ 3 mi., Wind Speed $<$ 17 kts), Selected Times

			JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0000Z	BELIZE INTL	BZ	30	27	30	29	29	30	31	30	30	29	29	29
LIBERIA	CS	21	15	24	20	30	28	30	30	30	30	29	27	27
LIMON	CS	29	27	30	29	30	30	30	29	30	29	28	29	29
NICoya	CS	30	27	30	29	31	29	30	30	28	29	29	31	31
PUNTARENAS	CS	31	28	31	30	30	29	30	29	29	30	29	31	31
SAN JOSE	CS	15	12	19	20	26	23	25	24	22	23	22	22	22
ACAJUTLA	ES	31	28	31	30	30	31	31	31	29	31	30	31	31
SAN SALVADOR	ES	30	27	30	29	30	29	30	30	29	30	30	30	30
SANTA ANA	ES	30	28	31	30	30	28	30	31	30	31	29	31	31
FLORES	GU	28	27	30	26	26	30	31	31	28	29	28	27	27
GUATEMALA CITY	GU	27	23	27	19	23	26	29	25	23	25	26	26	26
HUEHUETENANGO	GU	30	27	30	28	28	30	30	30	27	30	29	31	31
POPTUN	GU	29	27	31	25	25	29	30	31	27	27	25	25	29
PUERTO BARRIOS	GU	28	26	29	27	26	27	29	29	29	29	28	28	28
RETALHULEU	GU	31	28	29	26	25	26	26	26	22	23	28	31	31
SAN JOSE	GU	31	28	30	22	25	28	30	30	29	29	29	31	31
CATACAMAS	HO	30	28	30	27	26	29	30	30	29	31	30	30	30
CHOLUTECA	HO	30	27	30	26	26	26	28	29	30	28	29	30	30
GUANAJA	HO	26	20	24	22	14	14	13	19	19	21	27	27	24
ISLAS DEL CISNE	HO	29	27	29	28	29	28	28	29	30	27	29	29	30
LA CEIBA	HO	29	27	28	26	26	28	25	27	29	29	27	27	26
PUERTO LEMPIRA	HO	29	24	29	29	29	29	29	29	30	29	28	25	29
SAN PEDRO SULA	HO	29	27	29	28	28	28	28	30	31	29	30	28	30
TEGUCIGALPA	HO	30	27	30	25	27	27	27	30	29	28	29	29	30
TELA	HO	29	26	29	27	26	26	26	30	30	29	28	27	28
BLUEFIELDS	NK	29	28	29	29	29	29	25	28	28	28	28	28	29
CHINAMDEGA	NK	29	27	31	30	30	28	31	31	30	30	30	30	31
JUIGALPA	NK	31	28	31	30	31	29	30	29	30	29	31	30	31
MANAGUA	NK	31	28	31	29	30	29	30	30	30	29	31	30	31
PUERTO CABEZAS	NK	28	26	29	27	29	25	26	26	30	29	28	26	29
RIVAS	NK	29	27	31	30	30	29	31	31	31	30	31	29	31
BOCAS DEL TORO INTL	PH	31	28	31	30	31	30	31	31	30	31	31	29	31
CHANGUINOLA INTL	PH	30	28	31	29	31	30	31	31	30	31	31	30	31
DAVID	PH	27	21	28	26	29	26	28	26	28	26	27	26	30
HOWARD AFB	PH	31	28	31	30	31	30	30	31	30	31	31	31	31
LA PALMA	PH	31	28	31	30	30	30	31	31	31	30	31	29	31
PANAMA CITY	PH	30	27	28	29	30	30	31	30	31	30	30	30	31
PORVENIR	PH	25	24	27	28	31	30	31	31	31	29	31	29	28
RIO HATO	PH	28	23	21	23	29	30	30	30	30	31	30	31	31
SANTIAGO	PH	28	23	25	26	30	30	31	31	30	30	30	31	31
TOCUMEN	PH	31	28	30	29	30	29	30	30	29	30	29	29	31

TABLE B-19, Cont'd

	0600Z	BZ	CS	ES	GU	GU	GU	HO	HO	HO	NK	PH	PH	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL		29	26	29	28	30	28	30	31	27	27	27	27	27	27	27	27	27	27	27	27	27	27	27	
SAN JOSE		16	14	18	20	27	27	25	26	26	26	25	25	25	25	25	25	25	25	25	25	25	25	25	
ACAJUTLA		31	28	31	29	28	28	30	30	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	
SAN SALVADOR		30	26	30	29	30	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	
GUATEMALA CITY		21	19	22	17	20	17	20	18	16	16	16	18	18	18	18	18	18	18	18	18	18	18	19	
HUEHUETENANGO		31	27	31	29	30	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29	
PUERTO BARRIOS		29	26	29	27	30	27	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
SAN JOSE		30	27	31	25	27	28	28	30	31	29	29	29	29	29	29	29	29	29	29	29	29	29	29	
CATACAMAS		29	26	31	29	28	28	28	30	28	29	29	29	29	29	29	29	29	29	29	29	29	29	29	
CHOLUTECA		28	26	30	26	28	28	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
ISLAS DEL CISNE		29	27	28	27	28	27	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	
SAN PEDRO SULA		30	28	30	27	29	29	29	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	
TEGUCIGALPA		29	25	30	29	27	28	28	31	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
TEL A		HO	HO	HO	HO	HO	HO	HO	HO	HO	HO	HO													
MANAGUA		31	26	31	30	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	
HOWARD AFB		31	28	31	30	31	30	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	
TOCUMEN		28	31	30	31	30	31	30	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	

	1200Z	BZ	CS	CS	CS	CS	CS	ES	ES	ES	ES	ES	ES	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL		25	23	29	27	29	26	29	28	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
LIMON		28	26	30	28	28	28	28	29	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	
NICOA		30	28	31	29	28	27	28	28	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
PUNTARENAS		31	28	31	30	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	
SAN JOSE		17	15	20	21	21	29	27	26	27	27	26	27	26	27	26	27	28	28	29	29	29	29	29	
ACAJUTLA		30	27	31	29	30	30	30	30	30	30	30	30	30	30	30	30	31	31	31	31	31	31	31	
SAN SALVADOR		30	27	29	28	27	24	28	25	25	25	25	25	25	25	25	25	24	24	24	24	24	24	24	
SANTA ANA		30	28	30	30	31	27	30	29	27	27	27	27	27	27	27	27	31	31	31	31	31	31	31	
FLORES		14	19	23	22	20	24	23	20	23	20	22	20	22	20	20	20	19	19	19	19	19	19	19	
GUATEMALA CITY		19	18	17	14	17	14	17	20	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	
HUEHUETENANGO		20	18	24	22	18	23	22	20	22	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
POPTUN		21	23	27	22	22	20	22	20	22	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
PUERTO BARRIOS		25	24	27	25	25	24	25	24	25	28	28	28	28	28	28	28	28	28	28	28	28	28	28	
RETALHULEU		31	28	29	17	21	21	21	20	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	
SAN JOSE		26	26	26	17	18	18	18	18	18	20	20	20	20	20	20	20	20	20	20	20	20	20	20	
CATACAMAS		27	27	31	29	27	26	28	30	29	27	28	28	28	28	28	28	27	27	27	27	27	27	27	
CHOLUTECA		25	30	25	24	24	24	24	24	24	25	25	25	25	25	25	25	25	25	25	25	25	25	25	
ISLAS DEL CISNE		30	27	28	29	29	28	28	28	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
SAN PEDRO SULA		28	27	29	27	29	27	28	28	28	30	30	30	30	30	30	30	30	30	30	30	30	30	30	
TEGUCIGALPA		30	27	31	26	26	26	26	26	26	27	27	27	27	27	27	27	27	27	27	27	27	27	27	
TEL A		30	25	29	28	27	26	27	26	27	28	27	28	27	28	27	28	27	28	27	28	27	28	28	

TABLE B-19, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BLUEFIELDS	NK	27	27	29	29	28	26	27	26	26	29	26	27
HANAGUA	NK	31	28	31	30	30	31	30	29	31	30	31	31
PUERTO CABEZAS	NK	24	25	29	27	26	24	25	28	28	26	26	27
RIVAS	NK	28	25	30	28	31	29	28	30	30	30	30	30
BOCAS DEL TORO INTL	PH	31	28	30	30	30	30	31	31	31	31	28	30
CHANGUINOLA INTL	PH	30	28	30	30	31	30	31	31	30	31	29	30
DAVID	PH	27	26	29	25	27	21	22	20	25	26	22	26
FORT SHERMAN	PH	31	28	31	30	31	30	31	31	30	31	30	31
HOWARD AFB	PH	31	28	31	30	31	30	31	31	30	31	30	31
PANAMA CITY	PH	31	28	31	30	31	30	31	31	30	31	30	31
POYENIR	PH	22	19	23	26	30	30	29	30	29	30	27	24
RIO HATO	PH	31	27	31	30	31	30	31	31	30	31	30	31
TOCUMEN	PH	31	28	31	30	30	29	31	30	30	30	30	31
1800Z													
BELIZE INTL	BZ	30	26	30	29	29	28	30	30	29	28	28	27
LIBERIA	CS	16	13	16	17	26	26	27	26	29	30	29	21
LIMON	CS	29	27	31	28	30	29	30	29	30	30	29	29
NICOYA	CS	29	27	29	30	31	30	31	30	29	30	29	30
PUNTARENAS	CS	31	27	31	29	31	30	31	31	29	31	30	31
SAN JOSE	CS	8	7	13	16	25	24	20	23	25	26	23	16
ACAJUTLA	ES	31	28	31	29	29	30	31	31	30	31	30	31
SAN SALVADOR	ES	29	26	30	30	31	29	30	31	30	30	28	30
SANTA ANA	ES	31	27	31	30	31	29	30	31	30	31	30	31
FLORES	GU	27	24	30	27	26	29	31	31	29	29	28	26
GUATEMALA CITY	GU	24	22	29	25	28	28	29	28	28	29	26	26
HUEHUETENANGO	GU	29	28	30	29	29	30	31	30	30	30	28	30
POPTUN	GU	27	27	27	25	27	26	27	26	27	26	23	27
PUERTO BARRIOS	GU	27	26	29	27	28	29	30	30	29	29	28	26
RETALHULEU	GU	30	28	30	26	28	29	31	30	29	28	30	31
SAN JOSE	GU	31	26	30	22	23	29	30	31	29	31	30	31
CATACAMAS	HO	30	26	30	28	28	29	30	30	30	31	29	30
CHOLUTECA	HO	27	25	28	23	26	29	30	31	29	30	27	27
GUANAJA	HO	27	24	25	25	28	25	28	27	29	28	25	27
ISLAS DEL CISNE	HO	28	27	29	27	29	29	29	30	28	30	27	30
LA CEIBA	HO	28	27	30	26	27	27	30	31	29	29	27	29
PUERTO LEMPIRA	HO	28	25	30	28	29	29	29	29	29	27	26	29
SAN PEDRO SULA	HO	31	26	29	26	28	29	31	31	30	29	29	29
TEGUCIGALPA	HO	29	26	30	26	28	29	30	30	30	30	28	30
TELA	HO	28	26	30	28	24	24	28	31	31	30	29	28
BLUEFIELDS	NK	28	27	27	28	28	24	24	25	25	28	25	26
CHINANDEGA	NK	28	27	29	29	30	29	30	31	29	31	29	30
JUIGALPA	NK	31	28	31	29	31	29	31	31	31	30	30	31
HANAGUA	NK	29	27	29	29	30	29	30	30	30	30	30	30
PUERTO CABEZAS	NK	29	26	29	28	29	25	26	30	28	30	26	28
RIVAS	NK	25	22	27	28	31	30	30	30	30	30	31	29

TABLE B-19, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BOCAS DEL TORO INTL	PH	31	28	31	30	31	30	31	31	30	31	29	30
CHANGUINOLA INTL	PH	30	28	30	30	31	30	31	31	30	31	30	30
DAVID	PH	24	22	26	27	30	30	30	29	28	30	28	30
FORT SHERMAN	PH	30	28	30	27	27	22	23	25	26	25	24	28
HOWARD AFB	PH	31	28	30	30	31	30	31	31	30	30	29	30
JAQUE	PH	31	28	31	30	30	29	29	31	30	30	29	30
LA PALMA	PH	31	28	31	30	31	30	31	31	30	31	30	31
PANAMA CITY	PH	29	25	27	29	31	30	31	31	30	30	29	31
PORVENIR	PH	23	22	27	28	30	30	31	31	29	30	29	27
RIO HATO	PH	27	23	25	27	30	30	30	31	30	31	29	30
SANTIAGO	PH	25	25	29	28	31	30	31	31	30	31	30	30
TOCUMEN	PH	25	23	26	26	30	29	30	30	28	29	29	29

TABLE B-20 Days Favorable for Container Parachute Operations (Ceiling \geq 1,500 ft,
Visibility \geq 3 mi., Wind Speed \leq 21 kts), Selected Times

		0000Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	30	28	30	29	29	30	31	30	30	30	30	29	29
LIBERIA	CS	29	23	30	26	30	29	30	30	30	30	30	29	31
LIMON	CS	29	27	31	29	31	29	30	30	29	29	29	28	29
NICARAYA	CS	31	28	31	30	30	29	30	29	29	29	29	29	31
PUNTARENAS	CS	31	28	31	28	28	27	24	28	25	23	23	24	26
SAN JOSE	CS	26	23	28	28	28	27	24	28	25	23	23	24	26
ACAJUTLA	ES	31	28	31	30	30	30	31	31	29	31	30	30	31
SAN SALVADOR	ES	31	28	31	30	30	29	30	30	29	30	30	30	31
SANTA ANA	ES	31	28	31	30	30	28	31	31	30	31	29	31	31
FLORES	GU	28	27	30	27	26	30	31	31	28	29	28	27	27
GUATEMALA CITY	GU	30	27	29	21	23	27	30	27	23	27	28	28	29
HUEHUETENANGO	GU	31	28	31	29	28	28	30	30	27	30	29	29	31
POPTUN	GU	29	27	31	25	25	30	30	31	27	27	25	25	29
PUERTO BARRIOS	GU	29	26	30	27	26	27	29	29	29	29	28	28	28
RETALHULEU	GU	31	28	30	26	25	26	26	28	22	23	23	28	31
SAN JOSE	GU	31	28	30	22	25	28	30	30	29	29	29	29	31
CATACAMAS	HO	30	28	31	27	29	30	30	29	30	29	30	30	31
CHOLUTECA	HO	31	28	31	28	26	26	28	30	28	29	30	30	31
GUANAJA	HO	28	26	28	26	25	23	24	28	27	29	28	28	28
ISLAS DEL CISNE	HO	30	28	30	30	30	29	30	30	28	29	29	29	30
LA CEIBA	HO	29	27	29	27	28	27	30	30	29	28	27	26	26
PUERTO LEMPIRA	HO	30	26	30	30	30	29	29	30	29	28	26	26	29
SAN PEDRO SULA	HO	29	27	29	28	28	26	28	30	31	30	29	30	30
TEGUCIGALPA	HO	31	28	31	26	27	27	30	29	29	29	29	29	30
TEL A	HO	29	26	30	28	26	27	30	30	29	29	27	28	28
BLUEFIELDS	NK	29	28	29	29	29	28	25	28	26	28	29	28	29
CHINANDEGA	NK	31	28	31	30	31	29	31	31	30	30	30	30	31
JUIGALPA	NK	31	28	31	30	31	29	31	30	29	31	30	30	31
MANAGUA	NK	31	28	31	27	30	29	29	30	29	30	29	28	30
PUERTO CABEZAS	NK	30	27	30	29	28	26	28	30	31	30	31	30	31
RIVAS	NK	31	28	31	26	27	27	30	29	29	29	29	29	30
BOCAS DEL TORO INTL	PM	31	26	31	30	31	30	31	31	31	30	31	29	31
CHANGUINOLA INTL	PH	30	28	31	29	31	30	31	31	31	30	31	29	31
DAVID	PH	31	28	30	29	29	26	28	29	26	27	26	26	30
HOWARD AFB	PH	31	28	31	30	31	30	31	30	31	30	31	30	31
LA PALMA	PH	31	28	31	30	31	30	31	30	31	30	31	29	31
PANAMA CITY	PH	31	28	31	30	31	30	31	31	31	30	31	30	31
PORENR	PH	30	28	31	30	31	30	31	31	31	30	31	30	31
RIO HATO	PH	31	28	31	29	30	30	31	31	30	31	30	30	31
SANTIAGO	PH	31	27	31	30	30	30	31	31	30	31	30	29	31
TOCUMEN	PH	31	28	31	30	30	29	30	30	29	30	29	29	31

TABLE B-20, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
0600Z	BELIZE INTL	BZ	29	26	29	28	30	28	30	31	27	27	27
SAN JOSE	CS	26	24	28	27	28	29	29	29	27	26	27	29
ACAJUTLA SAN SALVADOR	ES	30	28	31	29	29	28	30	30	30	31	30	31
GUATEMALA CITY HUEHUETENANGO PUERTO BARRIOS SAN JOSE	GU	22	21	22	18	20	17	20	18	20	18	21	21
CATACAMAS CHOLUTECA ISLAS DEL CISNE SAN PEDRO SULA TEGUCIGALPA TEL A	HO	29	28	31	29	28	30	28	29	29	28	27	28
MANAGUA	NK	31	28	31	30	31	30	31	31	31	30	31	31
HOWARD AFB TOCUMEN	PH	31	28	31	30	31	30	31	31	30	30	31	31
1200Z		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	25	23	29	27	29	26	29	28	25	23	23	27
LIMON NICOYA PUNTARENAS SAN JOSE	CS	28	26	30	28	28	28	29	30	30	31	29	28
ACAJUTLA SAN SALVADOR SANTA ANA	ES	31	28	31	29	30	30	30	31	30	31	30	31
FLORES GUATEMALA CITY HUEHUETENANGO POPTUN PUERTO BARRIOS RETALHULEU SAN JOSE	GU	14	19	23	22	14	17	20	24	23	20	14	15
CATACAMAS CHOLUTECA ISLAS DEL CISNE SAN PEDRO SULA TEGUCIGALPA TEL A	HO	28	27	31	29	27	30	29	27	28	27	28	28

TABLE B-20, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BLUEFIELDS	NK	28	27	29	28	26	27	24	26	29	26	27	
HANAGUA	NK	31	28	31	30	30	31	30	29	31	30	31	
PUERTO CABEZAS	NK	26	26	29	27	25	26	28	29	31	27	28	
RIVAS	NK	30	28	31	30	31	29	29	30	30	30	31	
BOCAS DEL TORO INTL	PH	31	28	31	30	30	30	31	30	31	29	30	
CHANGUINOLA INTL	PH	30	28	30	29	31	30	31	30	31	29	30	
DAVID	PH	31	28	31	30	31	30	30	30	28	29	27	
FORT SHERMAN	PH	27	26	29	25	27	21	22	20	25	26	22	
HOWARD AFB	PH	31	28	31	30	31	30	31	31	30	31	30	
PANAMA CITY	PH	31	28	31	30	31	30	31	31	30	31	30	
PORENVIR	PH	30	28	31	30	31	30	30	31	30	31	29	
RIO HATO	PH	31	28	31	30	31	30	31	31	30	31	30	
TOCUMEN	PH	31	28	31	30	30	29	31	30	30	30	31	

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1800Z	BELIZE INTL	BZ	30	26	31	29	29	28	30	30	29	28	28
LIBERIA	CS	24	23	27	27	31	26	29	30	30	31	30	28
LIMON	CS	29	27	31	28	30	29	30	29	30	30	29	30
NICoya	CS	31	28	31	30	31	30	31	30	29	30	29	30
PUNTARENAS	CS	31	27	31	30	31	30	31	31	31	31	30	31
SAN JOSE	CS	20	20	26	24	30	28	26	29	29	31	29	26
ACAJUTLA	ES	31	28	31	29	30	31	31	31	30	31	30	31
SAN SALVADOR	ES	31	28	31	30	30	28	31	30	28	30	29	31
SANTA ANA	ES	31	28	31	30	31	29	30	31	30	31	30	31
FLORES	GU	27	24	30	26	26	29	31	31	29	29	28	26
GUATEMALA CITY	GU	30	26	31	27	28	29	30	30	29	31	29	30
HUEHUETENANGO	GU	31	28	31	29	29	30	31	31	30	30	28	30
POPTUN	GU	28	26	30	26	26	28	27	27	29	26	23	27
PUERTO BARRIOS	GU	28	26	29	29	29	29	30	30	29	29	29	29
RETALHULEU	GU	30	28	30	26	26	29	31	31	29	28	30	31
SAN JOSE	GU	31	28	30	22	23	23	29	31	29	31	30	31
CATACAMAS	HO	31	28	31	29	30	29	30	31	31	31	29	30
CHOLUTECA	HO	30	27	30	26	28	30	31	31	29	30	30	30
GUANAJA	HO	29	26	29	29	29	29	29	29	29	29	28	30
ISLAS DEL CISNE	HO	30	28	30	30	31	29	30	31	29	30	28	30
LA CEIBA	HO	28	27	30	27	28	28	28	31	29	29	27	29
PUERTO LEMPIRA	HO	30	26	31	29	29	29	30	29	29	29	26	29
SAN PEDRO SULA	HO	31	26	30	26	22	29	31	31	30	29	29	29
TEGUCIGALPA	HO	30	28	31	27	26	29	31	31	30	31	30	30
TELA	HO	28	26	30	28	24	28	31	31	30	29	28	26
BLUEFIELDS	NK	28	27	28	28	28	25	24	25	25	26	26	28
CHINANDEGA	NK	30	28	30	30	30	30	30	31	29	31	29	31
JUIGALPA	NK	31	28	31	30	31	29	31	31	30	31	30	31
HANAGUA	NK	31	28	31	29	31	30	30	30	30	30	30	31
PUERTO CABEZAS	NK	30	27	30	29	31	27	29	30	29	30	28	30
RIVAS	NK	30	26	30	29	31	30	30	31	30	31	30	31

TABLE B-20, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BOCAS DEL TORO INTL	PH	31	28	31	30	31	30	31	31	30	31	30	30
CHANGUINOLA INTL	PH	30	28	31	30	31	30	31	31	30	31	30	30
DAVID	PH	30	26	29	30	31	30	31	31	29	28	30	28
FORT SHERMAN	PH	30	28	30	27	27	22	23	25	26	25	24	26
HOWARD AFB	PH	31	28	31	30	31	30	31	31	30	30	29	30
JAQUE	PH	31	28	31	30	31	30	31	31	31	30	30	31
LA PALMA	PH	31	28	31	30	31	29	29	31	29	30	30	31
PANAMA CITY	PH	31	28	31	30	31	30	31	31	30	31	30	31
PORVENIR	PH	30	28	31	30	31	30	31	31	30	30	30	31
RIO HATO	PH	31	28	31	30	31	30	31	31	30	31	30	31
SANTIAGO	PH	29	28	31	30	31	30	31	30	31	30	30	31
TOCUMEN	PH	30	28	30	29	31	29	31	30	30	31	29	31

TABLE B-21 Days Favorable for HALO Parachute Operations (Ceiling > 2,500 ft., Visibility > 5 mi., Wind Speed < 13 kts), Selected Times

0000Z		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	82	28	27	27	25	27	25	27	28	29	29	27	26
LIBERIA	CS	19	13	20	17	26	27	24	25	28	27	26	26
LIMON	CS	25	24	27	27	28	27	27	26	27	27	24	25
NICARAYA	CS	27	24	26	27	29	27	27	27	24	24	26	29
PUNTARENAS	CS	30	27	31	29	28	27	29	27	26	27	27	31
SAN JOSE	CS	10	8	13	15	22	19	20	19	18	17	16	16
ACAJUTLA	ES	30	27	30	27	26	29	30	30	27	30	30	31
SAN SALVADOR	ES	28	25	28	25	26	27	29	29	27	29	28	29
SANTA ANA	ES	30	28	30	29	30	27	30	31	29	31	29	31
FLORES	GUATEMALA CITY	62	24	25	28	24	22	27	29	30	26	25	24
HUEHUETENANGO	GU	26	22	23	20	20	20	20	23	23	20	19	19
POPTUN	GU	28	24	27	25	20	24	29	30	23	24	19	26
PUERTO BARRIOS	GU	24	21	25	19	21	21	21	21	24	25	24	22
RETALHULEU	GU	29	27	24	20	16	23	22	20	15	16	26	29
SAN JOSE	GU	30	26	24	13	13	24	26	26	23	24	27	30
CATACAMAS	HO	28	26	29	23	25	26	27	28	29	26	29	28
CHOLUTeca	HO	29	24	29	22	22	22	26	28	29	25	27	29
GUANAJA	HO	18	14	7	16	12	7	13	13	17	22	19	18
ISLAS DEL CISNE	HO	24	23	22	22	23	23	26	26	25	25	26	25
LA CEIBA	HO	24	22	25	22	24	20	22	24	25	25	22	20
PUERTO LEMPIRA	HO	22	22	26	27	27	27	24	25	25	26	22	25
SAN PEDRO SULA	HO	28	25	26	24	23	24	26	29	29	28	28	28
TEGUCIGALPA	HO	28	24	29	21	24	24	27	26	26	26	27	27
TELA	HO	24	21	27	22	23	21	23	24	24	25	23	24
BLUEFIELDS	NK	27	25	26	26	26	26	24	23	24	24	24	26
CHINANDEGA	NK	27	25	28	26	28	24	28	29	27	26	28	30
JUIGALPA	NK	30	28	31	27	27	25	26	27	27	30	27	29
MANAGUA	NK	29	26	29	24	28	26	27	27	26	26	29	30
PUERTO CABEZAS	NK	22	22	23	21	23	17	17	17	23	25	22	23
RIVAS	NK	24	24	28	27	30	26	28	26	27	26	27	28
BOCAS DEL TORO INTL	PH	29	26	30	27	29	28	29	30	28	29	27	29
CHANGUINOLA INTL	PH	28	26	30	27	29	29	27	30	28	29	26	29
DAVID	PH	25	20	23	26	24	22	25	24	20	20	21	24
HOWARD AFB	PH	31	28	31	30	29	30	29	30	29	30	29	31
LA PALMA	PH	30	28	30	30	28	28	28	28	28	29	28	30
PANAMA CITY	PH	28	22	25	24	27	27	28	29	29	29	28	30
PORVENIR	PH	28	16	20	22	29	27	29	30	27	28	25	22
RIO HATO	PH	16	12	12	17	27	28	28	28	27	28	27	26
SANTIAGO	PH	20	14	16	19	25	30	29	28	28	28	27	30
TOCUMEN	PH	29	25	26	26	28	27	29	29	27	27	27	27

TABLE B-21, Cont'd

	0600Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	27	25	26	25	22	26	28	23	26	25	25	25
SAN JOSE	CS	12	10	15	18	26	23	24	24	24	23	19	19
ACAJUTLA	ES	30	27	30	25	23	27	29	28	27	30	29	30
SAN SALVADOR	ES	29	26	30	27	30	26	28	27	25	26	26	30
GUATEMALA CITY	GU	14	15	17	10	13	12	14	13	12	15	14	13
HUEHUETENANGO	GU	28	26	28	23	25	19	26	23	20	23	24	26
PUERTO BARRIOS	GU	23	21	24	17	26	16	21	21	22	21	21	21
SAN JOSE	GU	27	24	30	25	14	20	23	25	25	27	26	26
CATACAMAS	HO	28	27	29	27	26	26	26	26	28	27	28	28
CHOLUTeca	HO	25	23	29	23	25	27	30	29	25	29	28	29
ISLAS DEL CISNE	HO	24	22	22	22	22	22	29	29	29	29	27	25
SAN PEDRO SULA	HO	28	26	28	24	25	27	30	29	28	27	28	28
TEGUCIGALPA	HO	27	27	29	23	25	26	29	29	26	27	25	25
TEL A	HO	23	23	27	24	21	25	27	27	28	24	23	25
MANAGUA	NK	30	28	30	28	26	26	30	30	28	28	29	31
HOWARD AFB	PH	31	28	31	30	31	30	31	31	30	30	30	31
TOCUMEN	PH	31	28	30	28	30	29	31	30	29	29	29	31

	1200Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	23	20	26	24	23	22	24	24	23	19	20	23
LIMON	CS	25	22	28	25	27	25	26	26	29	30	28	26
NICOYA	CS	29	26	30	28	27	25	25	28	24	19	21	29
PUNTARENAS	CS	31	28	31	30	30	28	30	30	30	28	29	30
SAN JOSE	CS	11	12	14	17	27	24	22	25	26	27	23	20
ACAJUTLA	ES	30	27	30	26	25	29	30	30	29	30	29	31
SAN SALVADOR	ES	29	26	29	25	23	22	28	28	29	23	26	29
SANTA ANA	ES	30	28	30	28	28	27	30	27	26	30	30	30
FLORES	GU	14	17	21	20	16	21	18	19	13	13	14	14
GUATEMALA CITY	GU	13	13	13	9	13	16	17	16	20	16	15	15
HUEHUETENANGO	GU	15	14	20	17	13	16	18	17	16	17	12	12
POPTUN	GU	19	22	25	19	20	24	22	21	19	12	14	20
PUERTO BARRIOS	GU	19	16	21	17	19	21	22	19	23	20	17	17
RETALHULEU	GU	31	26	24	12	19	26	30	28	27	30	29	31
SAN JOSE	GU	25	24	21	9	10	26	27	28	27	29	27	25
CATACAMAS	HO	25	26	29	28	24	24	27	26	24	26	26	24
CHOLUTeca	HO	25	23	28	23	22	29	29	29	26	28	25	27
ISLAS DEL CISNE	HO	25	23	22	22	23	22	27	27	29	26	25	25
SAN PEDRO SULA	HO	26	25	22	22	24	27	28	29	29	26	27	26
TEGUCIGALPA	HO	25	24	28	22	21	22	25	24	21	21	20	24
TEL A	HO	27	23	24	24	26	29	28	29	28	23	23	23

TABLE B-21, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BLUEFIELDS	NK	22	22	25	26	23	22	21	19	23	26	24	25
HANAGUA	NK	30	27	30	29	29	28	29	28	28	29	29	30
PUERTO CABEZAS	NK	20	21	22	22	20	18	16	22	24	25	23	21
RIVAS	NK	20	21	26	26	30	25	23	25	26	26	27	25
BOCAS DEL TORO INTL	PH	27	26	27	25	29	27	26	27	26	28	24	26
CHANGUINOLA INTL	PH	28	24	28	25	28	26	26	29	29	29	26	26
DAVID	PH	30	27	29	28	29	29	28	28	28	27	26	31
FORT SHERMAN	PH	27	25	27	21	25	19	19	19	25	25	19	23
HOWARD AFB	PH	31	28	31	30	30	29	27	30	30	30	31	29
PANAMA CITY	PH	30	28	30	29	29	27	30	30	29	29	29	30
PORVENIR	PH	14	11	16	18	25	27	24	26	24	27	21	14
RIO HATO	PH	29	26	38	28	30	30	30	31	30	30	29	30
TOUCUMEN	PH	31	28	28	26	29	28	30	30	28	29	29	31
1800Z													
BELIZE INTL	82	25	21	25	23	23	20	23	24	25	25	22	22
LIBERIA	CS	13	13	10	12	22	24	20	23	26	27	25	16
LIMON	CS	27	25	28	25	29	28	27	28	28	29	27	27
NICOCYA	CS	23	23	26	26	30	29	30	28	26	27	26	27
PUNTARENAS	CS	29	27	30	29	30	30	31	30	29	30	29	31
SAN JOSE	CS	4	4	7	10	20	20	17	19	20	23	19	10
ACAJUTLA	ES	30	27	30	26	25	29	30	30	29	30	30	29
SAN SALVADOR	ES	26	24	19	27	27	27	30	29	26	25	25	27
SANTA ANA	ES	31	26	30	29	31	29	30	31	29	30	29	30
FLORES	GU	21	20	26	24	21	23	25	26	23	22	21	22
GUATEMALA CITY	GU	16	14	28	15	16	15	16	13	17	16	16	15
HUEHUETENANGO	GU	27	25	28	24	24	25	26	24	25	23	23	26
POPTUN	GU	15	15	17	13	16	15	16	16	13	15	15	15
PUERTO BARRIOS	GU	22	20	23	19	24	25	25	25	27	26	23	24
RETALHULEU	GU	30	26	26	18	21	21	27	27	25	25	29	31
SAN JOSE	GU	30	26	22	11	14	16	29	29	27	28	29	30
CATACAMAS	HO	29	26	28	25	26	26	26	26	29	29	27	28
CHOLUTECA	HO	23	22	26	19	25	28	29	30	28	29	24	22
GUANAJA	HO	20	19	18	21	26	21	21	25	26	23	20	22
ISLAS DEL CISNE	HO	22	20	18	19	20	23	23	27	24	27	24	24
LA CEIBA	HO	26	26	28	23	24	25	28	29	28	27	24	24
PUERTO LEMPIRA	HO	22	20	26	24	24	23	24	23	25	24	24	21
SAN PEDRO SULA	HO	28	24	27	23	26	29	30	31	29	28	26	26
TEGUCIGALPA	HO	25	22	25	22	25	22	25	26	27	29	27	22
TEL	HO	25	23	25	23	23	24	24	27	29	29	25	23
BLUEFIELDS	NK	19	18	18	21	22	19	17	21	23	24	20	22
CHINANDEGA	NK	23	22	24	25	26	28	29	30	29	27	27	26
JUTIGALPA	NK	27	27	30	28	31	26	28	29	26	28	25	26
HANAGUA	NK	21	21	22	23	27	26	24	28	27	29	28	27
PUERTO CABEZAS	NK	21	20	21	20	24	15	15	21	22	23	19	21
RIVAS	NK	18	15	22	23	23	28	25	22	25	26	27	22

TABLE B-21, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BOCAS DEL TORO INTL	PH	27	25	29	27	30	27	27	28	28	29	26	26
CHANGUINOLA INTL	PH	28	26	29	27	30	28	29	28	29	27	27	27
DAVID	PH	22	19	23	24	27	26	28	26	26	25	24	29
FORT SHERMAN	PH	28	26	28	25	25	17	20	22	24	24	22	27
HOWARD AFB	PH	28	23	25	27	30	29	30	30	29	29	26	30
JAQUE	PH	30	27	30	29	29	28	28	28	27	26	27	30
LA PALMA	PH	30	27	30	29	31	29	31	31	29	29	29	30
PANAMA CITY	PH	25	22	23	25	29	28	30	29	28	28	27	28
PORVENIR	PH	14	14	18	21	27	27	29	30	27	26	25	16
RIO HATO	PH	18	17	19	22	29	28	28	30	29	30	27	27
SANTIAGO	PH	24	24	23	23	29	29	31	30	29	29	29	29
TOCUMEN	PH	20	17	19	20	25	27	28	27	26	25	26	25

TABLE B-22 Days Favorable for Chemical Operations (Wind Speed 4-10 kts,
Temperature 33-89° F., No Precipitation). Selected Cities

	0000Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	13	17	24	22	22	15	20	23	1	12	13	10
LIBERIA	CS	11	7	11	5	4	6	7	6	3	4	7	8
LIMON	CS	16	7	8	9	8	4	5	6	7	4	4	4
NICoya	CS	15	18	16	16	8	2	4	3	1	1	3	10
PUNTARENAS	CS	12	11	12	10	6	2	4	4	4	3	4	10
SAN JOSE	CS	5	4	6	4	5	7	6	5	6	6	6	9
ACAJUTLA	ES	14	13	20	16	15	10	13	11	6	9	11	11
SAN SALVADOR	ES	17	19	22	21	20	13	12	11	12	16	16	16
SANTA ANA	ES	21	21	23	12	8	3	4	4	2	3	7	7
FLORES	GU	5	7	11	8	3	5	4	4	3	4	5	4
GUATEMALA CITY	GU	15	12	16	13	17	13	10	12	11	16	17	15
HUEHUETENANGO	GU	15	14	15	11	10	8	13	10	8	7	11	17
POPTUN	GU	6	6	14	17	10	14	23	8	2	2	1	4
PUERTO BARRIOS	GU	20	10	17	17	23	23	24	15	10	5	5	6
RETALHULEU	GU	20	21	17	11	7	5	7	5	5	5	6	9
SAN JOSE	GU	14	15	28	18	15	11	12	13	10	8	5	7
CATACAMAS	HO	6	11	17	16	11	6	5	5	5	6	7	8
CHOLUTeca	HO	10	4	15	3	5	4	4	5	4	3	8	13
GUANAJA	HO	7	10	4	11	7	5	9	6	7	6	6	9
ISLAS DEL CISNE	HO	16	16	15	15	12	13	19	22	21	20	18	17
LA CEIBA	HO	12	13	18	15	20	12	13	13	14	11	9	4
PUERTO LEMPIRA	HO	18	15	19	19	18	17	17	17	14	16	13	16
SAN PEDRO SULA	HO	18	14	22	19	16	12	13	12	13	13	13	14
TEGUCIGALPA	HO	19	19	23	19	18	13	16	17	14	13	13	19
TELa	HO	11	13	16	21	23	13	17	16	13	8	5	6
BLUEFIELDS	NK	16	15	17	18	13	8	13	12	14	10	10	14
CHINANDEGA	NK	10	12	13	15	13	9	7	6	7	7	7	10
JUIGALPA	NK	20	17	16	14	8	11	14	12	7	4	11	18
MANAGUA	NK	17	17	16	11	7	6	8	6	4	3	3	9
PUERTO CABEZAS	NK	15	13	14	13	14	8	8	8	16	15	16	18
RIVAS	NK	16	18	18	17	11	9	15	12	7	6	9	16
DAVID	PH	16	14	15	16	14	12	10	10	9	8	10	14
HOWARD AFB	PH	26	25	25	22	12	11	13	12	8	7	10	18
PANAMA CITY	PH	24	22	23	17	19	14	16	16	15	15	18	19
SANTIAGO	PH	16	10	12	13	12	8	7	7	8	6	5	14
TOCUMEN	PH	20	18	19	18	11	9	11	10	8	7	9	11

	0600Z	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	6	10	9	17	18	16	13	15	8	7	6	8
SAN JOSE	CS	9	7	10	13	16	14	15	16	14	15	14	11

TABLE B-22, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
ACAJUTLA SAN SALVADOR	ES	16	12	14	12	10	13	12	10	10	13	15	16
	ES	10	7	4	7	6	5	8	6	6	7	11	11
GUATEMALA CITY HUEHUETENANGO	GU	18	15	16	17	13	13	16	17	12	19	20	18
PUERTO BARRIOS SAN JOSE	GU	5	5	3	3	1	1	4	5	3	6	4	2
CATACAMAS CHOLUTECA	HO	7	10	12	16	8	4	5	6	5	4	6	9
	HO	12	7	7	14	15	14	15	22	24	18	22	17
ISLAS DEL CISNE SAN PEDRO SULA	HO	15	4	7	8	11	9	7	4	5	5	4	4
TEGUCIGALPA TEL A	HO	15	17	19	20	11	10	12	10	6	10	12	13
MANAGUA	NK	4	8	12	12	6	2	1	1	1	0	0	1
HOWARD AFB TOCUMEN	PM	22	22	23	19	8	7	10	9	6	5	6	5
	PM	6	7	8	7	5	7	6	7	4	5	5	5

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1200Z	BELIZE INTL	82	8	8	10	14	14	13	11	9	5	6	9
LIMON NICOYA PUNTARENAS SAN JOSE	CS	6	3	4	7	6	5	7	6	6	1	0	6
ACAJUTLA SAN SALVADOR SANTA ANA	ES	15	10	6	9	4	7	13	11	10	13	15	14
FLORES GUATEMALA CITY HUEHUETENANGO POPTUN PUERTO BARRIOS RETALHULEU SAN JOSE	GU	2	3	3	2	1	1	17	12	10	13	17	19
CATACAMAS CHOLUTECA ISLAS DEL CISNE SAN PEDRO SULA TEGUCIGALPA TEL A	HO	14	12	9	6	3	3	7	10	9	3	6	13
	HO	17	16	14	16	16	13	15	15	24	22	19	15
	HO	12	3	3	3	5	5	7	6	2	3	2	3
	HO	11	11	11	11	12	8	7	9	9	5	9	12
	HO	1	0	3	0	1	4	1	1	3	3	0	1

TABLE B-22, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BLUEFIELDS	NK	14	12	14	14	12	9	13	11	11	12	11	12
MANAGUA	NK	13	4	2	2	1	0	1	10	10	10	10	11
PUERTO CABEZAS	NK	13	13	12	15	14	6	9	12	15	14	12	16
RIVAS	NK	13	18	16	16	11	7	11	9	7	5	10	14
DAVID	PH	8	6	5	5	4	5	4	3	2	2	2	4
FORT SHERMAN	PH	14	9	10	9	2	2	5	3	2	2	2	6
HOWARD AFB	PH	17	17	19	15	6	5	6	6	5	4	5	6
PANAMA CITY	PH	15	18	12	8	9	6	6	4	9	10	14	14
TOCUMEN	PH	7	7	5	6	5	5	5	7	7	6	5	5

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
BELIZE INTL	BZ	18	16	16	15	11	8	9	12	14	16	16	18
LIBERIA	CS	2	1	0	0	2	6	4	10	6	9	11	4
LIMON	CS	14	15	15	14	12	11	11	14	15	13	11	13
NICOYA	CS	8	11	11	12	4	9	10	8	6	9	14	14
PUNTARENAS	CS	8	4	1	1	5	5	8	9	7	8	9	11
SAN JOSE	CS	3	3	5	5	9	9	7	7	7	9	7	6
ACAJUTLA	ES	18	17	17	12	16	12	15	15	14	17	16	16
SAN SALVADOR	ES	15	15	17	15	16	11	15	17	10	13	15	16
SANTA ANA	ES	7	7	4	5	1	1	5	4	1	2	6	7
FLORES	GU	16	13	17	8	6	7	9	10	11	10	10	11
GUATEMALA CITY	GU	14	10	12	11	8	9	9	15	16	16	12	12
HUEHUETENANGO	GU	13	14	9	13	13	13	15	17	16	11	14	10
POPTUN	GU	20	16	21	16	18	18	18	19	20	17	16	17
PUERTO BARRIOS	GU	9	10	7	2	11	4	19	18	21	16	17	17
RETALHULEU	GU	22	16	10	5	12	16	19	19	17	20	21	21
SAN JOSE	GU	11	11	13	7	7	7	12	11	11	9	6	5
CATACAMAS	HO	13	11	11	11	2	6	5	5	5	5	4	6
CHOLUTECA	HO	8	9	12	12	11	11	11	11	6	6	3	6
GUANAJA	HO	11	12	9	9	10	8	13	14	14	19	14	16
ISLAS DEL CISNE	HO	19	19	23	21	16	14	18	22	20	17	15	16
LA CEIBA	HO	14	13	18	10	9	11	15	13	12	12	12	12
PUERTO LEMPIRA	HO	9	10	9	9	3	5	7	6	7	11	8	8
SAN PEDRO SULA	HO	17	13	17	19	19	16	16	19	18	17	14	14
TEGUCIGALPA	HO	18	17	20	18	13	15	19	21	14	17	13	16
TELA	HO	13	17	20	18	13	15	19	21	14	17	13	16
BLUEFIELDS	NK	12	15	15	18	14	9	8	11	14	13	12	13
CHINANDEGA	NK	5	2	1	1	3	5	3	7	9	8	12	4
JUIGALPA	NK	15	15	17	10	6	14	16	19	15	19	15	15
MANAGUA	NK	11	8	4	2	3	7	11	21	19	19	17	10
PUERTO CABEZAS	NK	12	13	14	11	16	8	5	21	16	13	11	11
RIVAS	NK	16	13	17	18	16	15	16	16	15	16	14	19

TABLE B-22, Cont'd

		JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
DAVID	PH	14	10	12	14	19	20	20	21	20	22	21	22
FORT SHERMAN	PH	17	17	19	17	7	8	9	7	7	6	7	15
HOWARD AFB	PH	13	7	7	7	12	14	13	17	17	14	13	14
PANAMA CITY	PH	14	9	18	12	25	22	18	21	21	19	17	17
SANTIAGO	PH	12	10	7	8	11	8	11	9	10	12	11	13
TOCUMEN	PH	7	4	4	6	13	12	11	12	11	13	14	12

TABLE B-23 Cloud-Free Line-of-Sight (Percent Frequency Based on Total Sky Cover)

		SAN JOSE CS (FEB)								
HR	ANGLE	90	80	70	60	50	40	30	20	10
00 LST		95	94	94	94	94	94	92	91	89
06 LST		89	88	88	88	87	86	84	80	76
12 LST		85	84	84	83	83	81	79	75	70
18 LST		73	73	72	72	71	70	66	62	56
		SAN SALVADOR ES (FEB)								
HR	ANGLE	90	80	70	60	50	40	30	20	10
00 LST		89	88	88	87	87	86	84	81	77
06 LST		89	89	88	88	88	87	84	82	77
12 LST		84	83	83	82	81	80	77	73	67
18 LST		85	84	84	84	83	82	79	76	70
		GUATEMALA CITY GU (FEB)								
HR	ANGLE	90	80	70	60	50	40	30	20	10
00 LST		74	74	73	73	73	72	70	67	63
06 LST		55	55	55	55	54	53	50	48	43
12 LST		75	74	74	73	72	71	68	64	58
18 LST		77	77	76	76	75	74	71	68	62
		CATACAMAS HO (FEB)								
HR	ANGLE	90	80	70	60	50	40	30	20	10
00 LST		70	70	70	69	68	67	64	61	55
06 LST		67	66	66	65	64	62	59	54	47
12 LST		61	60	60	59	58	55	51	45	37
18 LST		67	66	66	65	64	62	59	53	46
		SAN PEDRO SULA HO (FEB)								
HR	ANGLE	90	80	70	60	50	40	30	20	10
00 LST		58	58	58	57	57	55	52	48	42
06 LST		61	61	61	60	60	58	55	50	44
12 LST		59	59	59	58	57	55	52	47	40
18 LST		64	64	64	63	62	60	56	51	43
		TEGUCIGALPA HO (FEB)								
HR	ANGLE	90	80	70	60	50	40	30	20	10
00 LST		76	76	75	74	74	72	69	65	59
06 LST		71	70	70	69	68	67	65	61	54
12 LST		70	69	69	68	67	65	61	55	47
18 LST		71	71	71	70	69	66	63	57	49
		MANAGUA NK (FEB)								
HR	ANGLE	90	80	70	60	50	40	30	20	10
00 LST		90	90	90	89	89	86	87	85	81
06 LST		76	77	77	76	76	74	71	67	61
12 LST		70	70	69	69	68	66	62	57	49
18 LST		71	71	70	70	69	67	65	61	55

TABLE B-23. Cont'd

		HOWARD AFB PM (FEB)									
	ANGLE	90	80	70	60	50	40	30	20	10	
HR	01 LST	91	90	90	89	88	87	85	81		
07 LST	76	76	75	74	72	70	65	58			
13 LST	69	69	68	67	65	61	55	46			
19 LST	81	80	80	79	77	75	70	64			
		SAN JOSE CS (MAY)									
HR	00 LST	57	56	56	55	54	52	49	44		
06 LST	45	45	44	43	41	39	35	29			
12 LST	39	39	38	37	35	33	29				
18 LST	23	23	23	23	21	19	17	13			
		SAN SALVADOR ES(MAY)									
HR	00 LST	54	53	53	52	51	48	44	39		
06 LST	43	43	43	42	41	40	36	32	25		
12 LST	52	52	51	50	48	44	39	31			
18 LST	47	47	46	45	43	40	36	29			
		GUATEMALA CITY GU (MAY)									
HR	00 LST	45	44	44	44	42	40	37	33		
06 LST	35	34	34	33	32	30	27	22			
12 LST	42	42	42	41	40	39	36	32	26		
18 LST	28	28	28	27	27	24	21	17			
		CATACAHAS HO (MAY)									
HR	00 LST	56	56	55	54	53	50	47	42		
06 LST	46	45	45	44	44	41	38	34			
12 LST	59	59	58	58	56	54	49	44	35		
18 LST	53	53	52	52	51	49	45	41	34		
		SAN PEDRO SULA HO (MAY)									
HR	00 LST	63	62	62	61	60	58	55	50		
06 LST	57	57	57	56	55	53	49	43	37		
12 LST	65	65	64	64	63	60	56	51	43		
18 LST	57	56	55	54	52	49	44	37			
		TEGUCIGALPA HO (MAY)									
HR	00 LST	50	50	49	49	47	44	40	34		
06 LST	50	49	49	48	47	45	41	36	29		
12 LST	57	57	56	55	54	51	47	41	32		
18 LST	44	44	43	43	42	40	36	32	25		

TABLE B-23, Cont'd

		MANAGUA NK (MAY)						SAN SALVADOR ES (AUG)						GUATEMALA CITY GU (AUG)						CATACAMAS HO (AUG)						SAN PEDRO SULA HO (AUG)																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
HR	ANGLE	90	80	70	60	50	40	30	20	10	90	80	70	60	50	40	30	20	10	90	80	70	60	50	40	30	20	10	90	80	70	60	50	40	30	20	10																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
00 LST		60	60	59	59	57	55	52	47		32	32	32	31	30	27	25	20		34	33	32	31	28	25	22	19		51	50	49	48	45	42	37	33	29	22	17	14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
06 LST		32	32	32	32	31	30	28	25	20		34	34	33	32	31	29	27	24		31	31	31	31	30	29	27	24		53	52	51	50	48	45	42	37	33	29	22	17	14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
12 LST		32	32	32	32	31	30	28	25	20		32	32	32	31	30	28	27	24		31	31	31	31	30	29	27	24		53	52	51	50	48	45	42	37	33	29	22	17	14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
18 LST		32	32	32	32	31	30	28	25	20		31	31	31	31	30	29	27	24		31	31	31	31	30	29	27	24		53	52	51	50	48	45	42	37	33	29	22	17	14																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																												
HR	ANGLE	90	80	70	60	50	40	30	20	10		HOWARD AFB PH (MAY)	90	80	70	60	50	40	30	20	10		40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	5	4	3	2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																								
01 LST		57	56	56	55	54	53	50	46	40		40	40	40	39	37	34	30	24		43	43	42	40	37	33	30	27	24		43	42	41	40	37	33	30	27	24	22	17	14	11	10	9	8	7	6	5	4	3	2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
07 LST		40	40	40	39	39	37	34	30	24		31	31	31	30	28	25	22	17		31	31	31	30	28	25	22	19		43	42	41	40	37	33	30	27	24	22	17	14	11	10	9	8	7	6	5	4	3	2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
13 LST		31	31	31	30	29	27	24	22	17		30	30	29	28	27	24	22	17		31	31	31	30	28	25	22	19		43	42	41	40	37	33	30	27	24	22	17	14	11	10	9	8	7	6	5	4	3	2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
19 LST		30	30	29	28	27	24	22	17	14		33	33	32	31	30	27	24	21		31	31	31	30	27	24	22	19		43	42	41	40	37	33	30	27	24	22	17	14	11	10	9	8	7	6	5	4	3	2	1																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
HR	ANGLE	90	80	70	60	50	40	30	20	10		SAN JOSE CS (AUG)	90	80	70	60	50	40	30	20	10		46	45	44	43	42	40	37	33	30	27	24	21	18	15	12	9	6	3	0	3	6	9	12	15	18	21	24	27	30	33	36	39	42	45	48	51	54	57	60	63	66	69	72	75	78	81	84	87	90	93	96	99	102	105	108	111	114	117	120	123	126	129	132	135	138	141	144	147	150	153	156	159	162	165	168	171	174	177	180	183	186	189	192	195	198	201	204	207	210	213	216	219	222	225	228	231	234	237	240	243	246	249	252	255	258	261	264	267	270	273	276	279	282	285	288	291	294	297	300	303	306	309	312	315	318	321	324	327	330	333	336	339	342	345	348	351	354	357	360	363	366	369	372	375	378	381	384	387	390	393	396	399	402	405	408	411	414	417	420	423	426	429	432	435	438	441	444	447	450	453	456	459	462	465	468	471	474	477	480	483	486	489	492	495	498	501	504	507	510	513	516	519	522	525	528	531	534	537	540	543	546	549	552	555	558	561	564	567	570	573	576	579	582	585	588	591	594	597	600	603	606	609	612	615	618	621	624	627	630	633	636	639	642	645	648	651	654	657	660	663	666	669	672	675	678	681	684	687	690	693	696	699	702	705	708	711	714	717	720	723	726	729	732	735	738	741	744	747	750	753	756	759	762	765	768	771	774	777	780	783	786	789	792	795	798	801	804	807	810	813	816	819	822	825	828	831	834	837	840	843	846	849	852	855	858	861	864	867	870	873	876	879	882	885	888	891	894	897	900	903	906	909	912	915	918	921	924	927	930	933	936	939	942	945	948	951	954	957	960	963	966	969	972	975	978	981	984	987	990	993	996	999	1002	1005	1008	1011	1014	1017	1020	1023	1026	1029	1032	1035	1038	1041	1044	1047	1050	1053	1056	1059	1062	1065	1068	1071	1074	1077	1080	1083	1086	1089	1092	1095	1098	1101	1104	1107	1110	1113	1116	1119	1122	1125	1128	1131	1134	1137	1140	1143	1146	1149	1152	1155	1158	1161	1164	1167	1170	1173	1176	1179	1182	1185	1188	1191	1194	1197	1200	1203	1206	1209	1212	1215	1218	1221	1224	1227	1230	1233	1236	1239	1242	1245	1248	1251	1254	1257	1260	1263	1266	1269	1272	1275	1278	1281	1284	1287	1290	1293	1296	1299	1302	1305	1308	1311	1314	1317	1320	1323	1326	1329	1332	1335	1338	1341	1344	1347	1350	1353	1356	1359	1362	1365	1368	1371	1374	1377	1380	1383	1386	1389	1392	1395	1398	1401	1404	1407	1410	1413	1416	1419	1422	1425	1428	1431	1434	1437	1440	1443	1446	1449	1452	1455	1458	1461	1464	1467	1470	1473	1476	1479	1482	1485	1488	1491	1494	1497	1500	1503	1506	1509	1512	1515	1518	1521	1524	1527	1530	1533	1536	1539	1542	1545	1548	1551	1554	1557	1560	1563	1566	1569	1572	1575	1578	1581	1584	1587	1590	1593	1596	1599	1602	1605	1608	1611	1614	1617	1620	1623	1626	1629	1632	1635	1638	1641	1644	1647	1650	1653	1656	1659	1662	1665	1668	1671	1674	1677	1680	1683	1686	1689	1692	1695	1698	1701	1704	1707	1710	1713	1716	1719	1722	1725	1728	1731	1734	1737	1740	1743	1746	1749	1752	1755	1758	1761	1764	1767	1770	1773	1776	1779	1782	1785	1788	1791	1794	1797	1800	1803	1806	1809	1812	1815	1818	1821	1824	1827	1830	1833	1836	1839	1842	1845	1848	1851	1854	1857	1860	1863	1866	1869	1872	1875	1878	1881	1884	1887	1890	1893	1896	1899	1902	1905	1908	1911	1914	1917	1920	1923	1926	1929	1932	1935	1938	1941	1944	1947	1950	1953	1956	1959	1962	1965	1968	1971	1974	1977	1980	1983	1986	1989	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019	2022	2025	2028	2031	2034	2037	2040	2043	2046	2049	2052	2055	2058	2061	2064	2067	2070	2073	2076	2079	2082	2085	2088	2091	2094	2097	2100	2103	2106	2109	2112	2115	2118	2121	2124	2127	2130	2133	2136	2139	2142	2145	2148	2151	2154	2157	2160	2163	2166	2169	2172	2175	2178	2181	2184	2187	2190	2193	2196	2199	2202	2205	2208	2211	2214	2217	2220	2223	2226	2229	2232	2235	2238	2241	2244	2247	2250	2253	2256	2259	2262	2265	2268	2271	2274	2277	2280	2283	2286	2289	2292	2295	2298	2301	2304	2307	2310	2313	2316	2319	2322	2325	2328	2331	2334	2337	2340	2343

TABLE B-23, Cont'd

		TEGUCIGALPA HO (AUG)						GUATEMALA CITY GU (NOV)					
	ANGLE	90	80	70	60	50	40	30	20	10			
HR													
00 LST		49	49	49	48	47	45	42	37	30			
06 LST		46	46	46	45	44	42	38	33	25			
12 LST		50	50	49	48	47	45	40	35	27			
18 LST		44	44	44	43	42	40	36	31	23			
	ANGLE	MANAGUA NK (AUG)						(NOV)					
HR													
00 LST		51	50	50	49	47	46	40	30	20	10		
06 LST		30	30	29	29	27	24	21	17				
12 LST		25	25	25	24	23	21	18	13				
18 LST		15	15	15	15	14	12	10	07				
	ANGLE	HOWARD AFB PH (AUG)						(NOV)					
HR													
01 LST		44	44	43	43	42	40	36	34	29			
07 LST		33	33	33	32	32	30	26	24	19			
13 LST		28	28	27	27	25	23	20	19	15			
19 LST		20	20	20	20	20	16	16	14	10			
	ANGLE	SAN JOSE CS (NOV)						(NOV)					
HR													
00 LST		56	56	55	55	54	53	50	47	42			
06 LST		52	52	52	51	50	49	46	42	36			
12 LST		44	44	43	43	42	40	37	34	27			
18 LST		31	31	31	30	30	28	26	23	18			
	ANGLE	SAN SALVADOR ES (NOV)						(NOV)					
HR													
00 LST		74	74	74	74	73	71	68	64	58			
06 LST		70	70	69	69	68	66	62	58	53			
12 LST		73	73	72	71	70	68	65	60	53			
18 LST		64	64	63	63	62	60	56	51	43			
	ANGLE	CATACAMAS HO (NOV)						(NOV)					
HR													
00 LST		58	58	57	57	56	54	51	47	41			
06 LST		61	61	60	60	59	56	52	47	40			
12 LST		54	54	53	52	51	49	44	39	32			
18 LST		52	52	51	51	51	47	43	38	30			

TABLE B-23, Cont'd

		SAN PEDRO SULA HO (NOV)									
HR	ANGLE	90	80	70	60	50	40	30	20	10	
00 LST		56	55	55	54	53	51	48	44	37	
06 LST		50	50	49	46	46	42	38	36	30	
12 LST		47	46	46	45	44	42	38	34	26	
18 LST		48	48	47	47	45	43	40	35	27	
		TEGUCIGALPA HO (NOV)									
HR	ANGLE	90	80	70	60	50	40	30	20	10	
00 LST		58	58	58	57	56	54	51	46	39	
06 LST		53	52	52	50	50	38	44	46	30	
12 LST		53	52	52	51	50	47	43	38	30	
18 LST		50	50	49	49	48	45	42	37	29	
		MANAGUA NK (NOV)									
HR	ANGLE	90	80	70	60	50	40	30	20	10	
00 LST		64	64	63	63	62	61	58	55	50	
06 LST		46	46	46	45	44	43	40	36	31	
12 LST		44	44	44	43	42	41	38	34	28	
18 LST		39	39	39	39	38	36	34	31	25	
		HOWARD AFB PH (NOV)									
HR	ANGLE	90	80	70	60	50	40	30	20	10	
01 LST		53	53	52	52	51	49	46	42	36	
07 LST		45	44	44	43	43	41	37	33	27	
13 LST		35	35	34	34	33	31	28	25	19	
19 LST		32	32	32	31	31	29	27	23	18	

TABLE B-24 Cloud-Free Line-of-Sight (Percent Frequency Based on Ceiling/Visibility \geq 3,000 ft/3 miles)

HR	ANGLE	SAN JOSE CS (FEB)						
		80	70	60	50	40	30	20
00 LST	ANGLE	99	98	98	98	98	97	97
06 LST	ANGLE	99	98	98	98	98	97	96
12 LST	ANGLE	99	98	98	97	97	96	95
18 LST	ANGLE	94	93	93	92	92	90	88
HR	ANGLE	SAN SALVADOR ES (FEB)						
00 LST	ANGLE	100	99	99	99	99	98	97
06 LST	ANGLE	100	99	99	99	99	98	97
12 LST	ANGLE	99	98	98	98	98	97	96
18 LST	ANGLE	100	99	99	99	98	97	96
HR	ANGLE	GUATEMALA CITY GU (FEB)						
00 LST	ANGLE	76	76	75	75	74	72	70
06 LST	ANGLE	66	66	65	65	63	61	58
12 LST	ANGLE	81	81	80	80	79	77	74
18 LST	ANGLE	88	88	87	87	86	85	83
HR	ANGLE	CATACAMAS HO (FEB)						
00 LST	ANGLE	91	90	90	90	89	88	86
06 LST	ANGLE	87	85	86	86	84	83	80
12 LST	ANGLE	82	81	80	80	79	77	73
18 LST	ANGLE	90	90	89	89	88	87	85
HR	ANGLE	SAN PEDRO SULA HO (FEB)						
00 LST	ANGLE	82	82	81	81	80	78	75
06 LST	ANGLE	83	82	82	81	80	79	76
12 LST	ANGLE	79	78	77	77	76	74	71
18 LST	ANGLE	83	83	82	82	81	80	76
HR	ANGLE	TEGUCIGALPA HO (FEB)						
00 LST	ANGLE	80	79	78	77	76	73	69
06 LST	ANGLE	76	76	75	74	72	69	64
12 LST	ANGLE	80	80	79	78	77	74	70
18 LST	ANGLE	83	82	82	81	80	79	76
HR	ANGLE	MANAGUA NK (FEB)						
00 LST	ANGLE	97	96	96	96	95	95	93
06 LST	ANGLE	95	94	94	94	93	92	90
12 LST	ANGLE	85	85	84	84	83	81	87
18 LST	ANGLE	91	90	90	89	88	86	82

TABLE B-24, Cont'd

		HOWARD AFB PH (FEB)									
		ANGLE	90	80	70	60	50	40	30	20	10
HR	01 LST		100	99	99	99	98	97	97	97	97
07 LST			95	94	94	94	93	93	92	92	95
13 LST			85	84	84	84	83	80	78	72	64
19 LST			95	94	94	94	93	93	91	88	85
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10
06 LST			94	93	93	93	92	91	90	88	
12 LST			98	97	97	97	97	96	95	94	
18 LST			91	90	90	90	89	86	83	77	
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10
06 LST			92	91	91	90	90	89	88	86	
12 LST			94	93	93	93	92	91	89	87	
18 LST			89	88	88	87	87	86	84	81	77
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10
06 LST			90	80	70	60	50	40	30	20	
12 LST			88	87	87	87	86	85	82	79	74
18 LST			88	87	87	87	86	85	82	79	74
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10
06 LST			75	75	74	74	73	72	69	66	61
12 LST			81	80	80	80	79	78	75	73	68
18 LST			74	73	73	72	71	69	66	60	52
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10
06 LST			GUATEMALA CITY GU (MAY)								
12 LST			75	75	74	74	73	72	69	66	
18 LST			81	80	80	80	79	78	75	73	
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10
06 LST			CATACAMAS HO (MAY)								
12 LST			86	85	85	85	84	82	80	75	70
18 LST			85	85	85	84	83	81	78	73	66
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10
06 LST			SAN PEDRO SULA HO (MAY)								
12 LST			85	84	84	83	82	81	78	73	67
18 LST			86	85	85	85	84	83	80	75	
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10
06 LST			TEGUCIGALPA HO (MAY)								
12 LST			86	85	85	85	84	82	79	75	69
18 LST			89	88	88	88	87	86	83	79	74
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10
06 LST			76	76	75	75	74	72	69	64	57
12 LST			74	74	73	73	71	69	66	63	53
18 LST			80	80	79	79	78	76	73	69	62
HR	00 LST	ANGLE	90	80	70	60	50	40	30	20	10

TABLE B-24, Cont'd

HR	ANGLE	MANAGUA NK (MAY)					(MAX.)	30	20	10
		90	80	70	60	50				
00 LST	91	90	89	89	88	85	82	77	71	63
06 LST	88	87	87	86	85	84	82	77	71	63
12 LST	79	79	78	78	77	74	71	65	58	51
18 LST	87	87	86	86	84	83	80	75	69	62
HR	ANGLE	HOWARD AFB PH (MAY)					(MAX.)	30	20	10
		90	80	70	60	50				
01 LST	93	93	92	92	91	90	89	86	82	71
07 LST	87	87	87	86	85	84	81	77	71	63
13 LST	81	81	80	79	78	76	73	67	58	51
19 LST	87	87	86	86	85	83	81	76	70	62
HR	ANGLE	SAN JOSE CS (AUG)					(MAX.)	30	20	10
		90	80	70	60	50				
00 LST	94	94	94	94	93	93	91	89	87	81
06 LST	99	98	98	98	98	98	97	96	94	88
12 LST	89	89	88	88	87	86	83	80	75	68
18 LST	82	82	81	81	80	78	75	72	66	60
HR	ANGLE	SAN SALVADOR ES (AUG)					(MAX.)	30	20	10
		90	80	70	60	50				
00 LST	83	82	82	82	81	81	79	77	74	68
06 LST	91	91	90	90	89	88	86	83	80	73
12 LST	86	85	85	84	83	82	79	76	70	63
18 LST	80	80	79	78	77	74	70	65	60	53
HR	ANGLE	GUATEMALA CITY GU (AUG)					(MAX.)	30	20	10
		90	80	70	60	50				
00 LST	55	55	54	54	53	51	48	45	39	33
06 LST	69	68	68	68	67	65	62	59	53	47
12 LST	65	65	64	63	62	60	56	50	42	36
18 LST	77	77	76	76	75	73	69	64	57	51
HR	ANGLE	CATACAMAS HO (AUG)					(MAX.)	30	20	10
		90	80	70	60	50				
00 LST	83	82	82	81	80	78	75	70	63	57
06 LST	86	86	86	85	84	82	80	75	70	64
12 LST	79	78	77	77	75	73	69	63	58	52
18 LST	82	81	80	79	77	74	68	60	54	48
HR	ANGLE	SAN PEDRO SULA HO (AUG)					(MAX.)	30	20	10
		90	80	70	60	50				
00 LST	74	74	73	72	71	68	64	58	48	42
06 LST	83	83	82	82	80	78	75	70	62	56
12 LST	76	76	75	75	73	71	67	60	54	48
18 LST	73	73	72	71	70	67	63	56	46	40

TABLE B-24, Cont'd

		TEGUCIGALPA HO (AUG)																	
		ANGLE	90	80	70	60	50	40	30	20	10								
HR	LST		72	71	71	70	69	67	63	57	49								
00	LST		63	63	62	62	61	58	54	48	40								
06	LST		69	68	68	67	66	64	60	55	46								
12	LST		74	73	73	72	71	69	66	61	54								
18	LST		82	82	81	81	80	78	75	70	62								
		ANGLE	90	80	70	60	50	40	30	20	10								
HR	LST		87	86	86	85	85	83	81	77	71								
00	LST		86	85	85	84	84	82	79	74	68								
06	LST		75	75	74	74	72	70	66	60	51								
12	LST		82	82	81	81	80	78	75	70	62								
18	LST		87	87	87	86	85	84	82	76	70								
		ANGLE	90	80	70	60	50	40	30	20	10								
HR	LST		94	94	94	93	92	92	90	87	83								
01	LST		69	69	68	68	68	65	63	78	72								
07	LST		83	83	83	82	81	79	76	70	72								
13	LST		87	87	87	86	85	84	82	76	70								
19	LST		90	80	70	60	50	40	30	20	10								
		ANGLE	90	80	70	60	50	40	30	20	10								
HR	LST		94	94	93	93	92	92	91	89	86								
00	LST		95	95	95	94	94	94	92	91	88								
06	LST		90	89	89	89	88	86	87	85	82								
12	LST		82	81	81	80	79	78	75	74	71								
18	LST		92	91	91	91	90	90	88	86	83								
		ANGLE	90	80	70	60	50	40	30	20	10								
HR	LST		96	96	96	95	95	95	94	93	92								
00	LST		99	98	98	98	97	97	96	96	94								
06	LST		96	96	96	95	95	95	93	92	89								
12	LST		92	91	91	91	90	90	88	86	83								
18	LST		82	81	81	81	80	78	75	70	63								
		ANGLE	90	80	70	60	50	40	30	20	10								
HR	LST		63	63	63	62	62	61	58	55	51								
00	LST		72	71	71	71	70	69	66	63	58								
06	LST		75	75	75	74	73	71	67	62	54								
12	LST		79	79	78	77	76	74	70	63	54								
18	LST		83	82	82	81	80	78	75	70	63								
		ANGLE	90	80	70	60	50	40	30	20	10								
HR	LST		86	85	84	84	83	82	78	74	67								
00	LST		85	85	84	84	83	81	78	73	66								
06	LST		79	79	78	77	76	74	70	63	54								
12	LST		83	82	82	81	80	78	75	70	63								
18	LST		83	82	82	81	80	78	75	70	63								

TABLE B-24, Cont'd

		SAN PEDRO SULA HO (NOV)									
	ANGLE	90	80	70	60	50	40	30	20	10	
HR	00 LST		85	84	84	83	82	80	78	73	66
06 LST		78	78	77	77	76	73	70	64	57	
12 LST		74	73	73	72	71	68	64	58	48	
18 LST		77	77	76	76	74	72	68	62	53	
		TEGUCIGALPA HO (NOV)									
HR	ANGLE	90	80	70	60	50	40	30	20	10	
00 LST		70	70	69	65	68	66	62	57	50	
06 LST		59	59	58	57	56	54	50	45	36	
12 LST		68	67	67	66	65	63	59	54	46	
18 LST		71	70	70	69	68	66	62	57	49	
		MANAGUA NK (NOV)									
HR	ANGLE	90	80	70	60	50	40	30	20	10	
00 LST		92	92	92	91	90	89	88	84	80	
06 LST		91	90	90	90	89	87	85	81	75	
12 LST		82	82	81	81	80	78	75	69	62	
18 LST		84	84	83	83	82	80	77	72	65	
		HOWARD AFB PH (NOV)									
HR	ANGLE	90	80	70	60	50	40	30	20	10	
01 LST		94	94	93	93	92	92	90	87	83	
07 LST		88	88	88	87	86	84	82	77	71	
13 LST		81	80	80	79	78	76	72	66	57	
19 LST		88	88	87	87	86	85	82	78	72	

TABLE B-25 Master Station List

STATION NAME	CO	LAT	LON	ELEV FEET	NUM YRS
AUGUSTINE PINE 10	BZ	17° 9' 48N	88° 7' 2W	UNK	10
BELIZE INTL	BZ	17° 5' 3N	88° 3' 0W	17	49
CENTRAL FARM	BZ	17° 22N	89° 00W	200	10
COOMA CAIRN	BZ	17° 00N	88° 8' 3W	UNK	10
COROZAL	BZ	18° 4' 0N	88° 40W	UNK	10
GRACIE ROCK	BZ	17° 37N	88° 45W	UNK	10
MACHACA	BZ	16° 20N	88° 90W	UNK	10
MANGO CREEK	BZ	16° 55N	88° 58W	12	10
MIDDLESEX	BZ	17° 03N	88° 52W	UNK	10
POMONA	BZ	17° 00N	88° 37W	UNK	10
STANN CREEK AGR	BZ	17° 00N	88° 22W	10	10
AGUA BUENA	CS	8° 7' 3N	82° 9' 2W	1000	13
ARGENTINA GRECIA	CS	10° 0' 3N	84° 35W	2705	30
BARTOLO	CS	9° 4' 2N	84° 10W	10	14
COLORADO	CS	10° 7' 3N	83° 58W	19	10
COTO 26	CS	8° 5' 3N	83° 05W	3	16
GOOD HOPE	CS	10° 0' 7N	83° 32W	354	20
JUAN VIVAS	CS	9° 5' 7N	83° 73W	3821	10
LIBERIA	CS	10° 6' 2N	85° 43W	262	12
LIMON	CS	10° 0' 0N	83° 05W	16	20
LOS DIAMANTES	CS	10° 22N	83° 77W	983	20
NARANJO	CS	10° 10N	84° 37W	3417	10
NICOYA	CS	10° 15N	85° 45W	426	10
ORTINA	CS	9° 8' 8N	84° 52W	734	10
PALMAR SUR	CS	8° 9' 5N	83° 47W	53	16
PUERTO CORTES	CS	8° 9' 7N	83° 53W	33	16
PUERTO VIEJO	CS	10° 4' 3N	83° 98W	291	10
PUNTARENAS	CS	9° 9' 7N	84° 83W	10	9
QUEBRADA GRANDE	CS	10° 8' 3N	85° 50W	1311	10
SAN JOAQUIN FLORES	CS	10° 0' 2N	84° 13W	3447	20
SAN JOSE	CS	9° 9' 8N	84° 22W	3080	97
SAN MIGUEL BARRANCA	CS	10° 0' 0N	84° 68W	459	20
SANTA CRUZ	CS	10° 27N	85° 62W	163	10
TURRIALBA	CS	9° 8' 8N	83° 63W	1974	30
ACAJUTLA	ES	13° 5' 7N	89° 83W	49	54
APOPA	ES	13° 8' 0N	89° 18W	1640	28
COATEPEQUE	ES	13° 9' 0N	89° 83W	2655	35
COJUTEPEQUE	ES	13° 7' 2N	88° 93W	2624	29
CUTUCU	ES	13° 3' 3N	87° 82W	16	29
EL CONGO	ES	13° 9' 0N	89° 50W	2755	34
FCA. SAN JOSE	ES	13° 7' 3N	89° 30W	3493	21
LA TONA	ES	13° 8' 5N	89° 28W	1000	27
METAPAN	ES	14° 3' 3N	89° 47W	1525	27
SAN MIGUEL	ES	13° 4' 5N	88° 12W	326	29
SAN SALVADORE	ES	13° 7' 0N	89° 12W	2230	55
SANTA ANA	ES	13° 9' 8N	89° 57W	2116	55
SONSONATE	ES	13° 7' 3N	89° 73W	738	42
TEXIS JUNCTION	ES	14° 1' 0N	89° 52W	1312	27
VALLE SAN JUAN	ES	13° 3' 5N	88° 62W	164	27
ZACATECOLUCA	ES	13° 5' 0N	88° 87W	556	29

TABLE B-25, Cont'd

STATION NAME	CO	LAT	LONG	ELEV FEET	NUM YRS
AGUA BLANCA	GU	14.52N	89.62W	2919	19
ANGUIATU	GU	14.35N	89.58W	1613	26
ANTIGUA	GU	14.55N	90.73W	5018	26
BELIZ	GU	14.67N	90.63W	2755	26
BUENA VISTA	GU	14.62N	91.63W	1449	16
CASTANEDA	GU	14.63N	89.43W	2131	27
CHAMPERICO	GU	14.30N	91.92W	25	25
CHIACAM	GU	15.55N	90.10W	3115	13
CHINAS YUB	GU	15.60N	90.47W	2591	19
COATEPEQUE	GU	14.70N	91.87W	1607	26
CONCEPCION	GU	14.32N	90.78W	1393	20
CREEK	GU	15.32N	88.95W	180	26
EL PASO	GU	17.25N	90.23W	163	11
EL RANCHO	GU	14.92N	90.00W	898	25
EL VALLE	GU	15.87N	90.28W	3394	14
ENTRE RIOS	GU	14.48N	91.57W	655	12
FLORES	GU	16.92N	89.88W	377	10
GUATEMALA CITY	GU	14.58N	90.52W	4884	50
GUAXAC	GU	15.33N	90.13W	3935	24
HUEHUETENANGO	GU	15.32N	91.47W	6235	10
LA GLORIA	GU	14.12N	90.28W	3214	13
LA MORENA	GU	14.17N	90.37W	2427	25
LA REUNION	GU	14.43N	90.83W	4696	20
LAS DELICIAS	GU	14.53N	91.02W	3279	31
LAS VINAS	GU	14.33N	90.43W	3329	44
LOS BALSAMOS	GU	14.98N	89.92W	4166	14
MAYAGUA	GU	15.45N	89.67W	1639	17
MOCCA	GU	15.35N	90.90W	3411	24
MORAN	GU	14.48N	90.53W	4011	26
MORELIA	GU	14.42N	90.97W	2951	51
PALC GORDO	GU	14.48N	91.40W	793	16
PAMPOJILA	GU	14.62N	91.13W	5018	23
PAWNEE PLAYITAS	GU	15.35N	88.82W	193	26
PEÑA PLATA	GU	14.45N	91.08W	2033	13
POPTUN	GU	16.32N	89.42W	1640	9
PUERTO BARRIOS	GU	15.72N	88.60W	3	26
QUIRIGUA	GU	15.27N	89.07W	239	26
RETALHULEU	GU	14.52N	91.70W	784	9
SAN JOSE	GU	13.92N	90.82W	6	13
SAN RAFAEL PANAN	GU	14.50N	91.25W	2164	10
SANARATE	GU	14.78N	90.20W	2663	25
SANTA TERESA	GU	14.98N	91.90W	2705	25
SEPACUITE	GU	15.47N	87.78W	3214	22
TENEDORES	GU	15.55N	89.63W	85	26
TINAJAS	GU	15.32N	89.67W	65	13
WESTFALIA	GU	15.25N	89.90W	2099	16

TABLE B-25, Cont'd

STATION NAME	CO	LAT	LON	ELEV FEET	NUM YRS
AGUA CALIENTE	HO	14.67N	87.30W	1820	15
AMAPA	HO	15.05N	87.98W	226	17
CATACAMAS	HO	13.30N	87.63W	16	22
CHOLUTECA	HO	14.90N	85.93W	1450	31
CHUMBAQUA	HO	13.32N	87.18W	157	27
COMAYAGUA	HO	15.25N	88.47W	997	18
COYOLES	HO	14.42N	87.63W	UNK	16
DULCE NOMBRE	HO	15.48N	86.68W	1008	32
EL ZAMORANO	HO	14.83N	88.83W	3352	16
FINCA #17	HO	15.00N	87.03W	2601	25
GUANACASTAL	HO	15.25N	87.88W	UNK	20
GUANAJA	HO	15.67N	87.83W	36	41
HAC. SAN ISIDRO	HO	16.47N	85.92W	6	27
ISLAS DEL CISNE	HO	13.87N	86.57W	2597	10
JUTIAPA	HO	17.40N	83.93W	UNK	9
JUTICALPA	HO	15.78N	86.57W	75	13
LA CEIBA	HO	15.75N	86.87W	85	35
LA MESA	HO	15.45N	87.93W	85	18
LAMANI	HO	14.15N	87.62W	2384	12
LOS PLANES	HO	15.62N	86.40W	226	41
MANACAL	HO	15.38N	88.17W	311	13
MARCLA	HO	14.12N	88.00W	3998	10
MINAS SAN ANDRES	HO	14.92N	88.93W	UNK	11
MOROCELI	HO	14.13N	86.88W	2020	13
NVO OCOTEPEQUE	HO	14.43N	89.17W	2601	20
NVO ROSARIO	HO	14.22N	87.08W	3860	54
PENA BLANCA	HO	14.93N	88.05W	1597	13
PROGRESO	HO	15.35N	87.97W	98	36
PUERTO CORTES	HO	15.80N	87.93W	3	39
PUERTO LEMPIRA	HO	15.22N	83.78W	42	20
SABANAGRANDE	HO	13.82N	87.27W	3345	13
SAN ALEJO	HO	15.63N	87.57W	UNK	13
SAN MARCOS	HO	13.42N	86.82W	3220	11
SAN PEDRO SULA	HO	15.45N	87.93W	102	42
SANTA ROSA DE COPAN	HO	14.78N	88.80W	3542	31
TEGUCIGALPA	HO	14.05N	87.22W	3302	40
TELA	HO	15.72N	87.48W	10	41
TRUJILLO	HO	15.92N	85.98W	60	16
URRACO	HO	15.55N	87.77W	39	28
VERACRUZ	HO	14.90N	88.78W	2997	16
YORO	HO	15.17N	87.12W	2000	13
ZACAPA	HO	14.68N	88.07W	1498	12
BLUEFIELDS	NK	12.00N	83.77W	28	23
CARATEA	NK	13.22N	85.75W	UNK	10
CHINANDEGA	NK	12.62N	87.15W	135	14
COLON	NK	11.12N	85.47W	UNK	23
ESTELI	NK	13.08N	66.38W	UNK	12
GRANADA	NK	11.93N	85.95W	UNK	79
JINOTEGA	NK	13.10N	86.00W	UNK	40
JUIGALPA	NK	12.08N	85.40W	384	24
LEON	NK	12.45N	86.87W	262	13
LOS PILARES	NK	10.83N	83.97W	UNK	24

TABLE B-25, Cont'd

STATION NAME	CO	LAT	LON	ELEV FEET	NUM YRS
MANAGUA	NK	12° 12N	86° 15W	174	37
MATagalpa	NK	12° 08N	85° 95W	UNK	10
MUHAN	NK	12° 13N	84° 97W	UNK	10
PUERTO CABEZAS	NK	14° 03N	83° 40W	45	20
RIVAS	NK	11° 43N	85° 83W	164	35
SAN ANTONIO	NK	12° 58N	87° 06W	UNK	56
SAN JUAN DEL NORTE	NK	10° 93N	83° 70W	UNK	24
SAN MARCOS	NK	11° 83N	86° 20W	UNK	10
SAN MIGUELITO	NK	11° 38N	84° 90W	UNK	25
SAN UBALDO	NK	11° 83N	85° 33W	UNK	25
SIUNA	NK	13° 67N	84° 58W	500	23
ALANJE	PH	8° 30N	82° 53W	UNK	10
ALTO LINO	PH	8° 60N	82° 50W	UNK	6
BALBOA HEIGHTS	PH	8° 97N	79° 55W	33	12
BOCA DE CUPE	PH	8° 05N	77° 58W	UNK	10
BOCAS DEL TORO INTL	PH	9° 33N	82° 23W	7	9
CALDERA	PH	8° 65N	82° 38W	UNK	10
CAMERON	PH	8° 07N	81° 65W	UNK	10
CHANGUINOLA INTL	PH	9° 47N	82° 52W	16	47
CHORRO	PH	8° 97N	79° 98W	140	19
CRISTOBAL	PH	9° 35N	79° 92W	UNK	96
DAVID	PH	8° 38N	82° 43W	89	9
FORT SHERMAN	PH	9° 33N	79° 98W	10	9
GAMBOA	PH	9° 12N	79° 70W	110	82
GATUN	PH	9° 27N	79° 93W	95	62
HOWARD AFB	PH	8° 92N	79° 60W	53	25
ISLA GRANDE	PH	9° 63N	79° 57W	240	36
JACQUE	PH	7° 52N	78° 15W	30	9
LA PALMA	PH	8° 42N	89° 15W	33	9
HADDEN DAM	PH	9° 23N	79° 62W	250	67
MONTE LIRIO	PH	9° 48N	78° 52W	280	58
NARGANA	PH	8° 98N	79° 52W	43	9
PANAMA CITY	PH	9° 02N	79° 62W	100	36
PEDRO MIGUEL	PH	9° 38N	79° 57W	350	30
PELUCA	PH	9° 57N	78° 95W	7	9
PORVENIR	PH	9° 90N	84° 10W	50	10
PUERTO ARMUELLES	PH	8° 67N	77° 42W	3	37
PUERTO OBALDIA	PH	8° 38N	80° 12W	98	9
RIO HATO	PH	9° 32N	79° 58W	270	53
SALAMANCA	PH	8° 40N	80° 12W	120	24
SANTA CLARA	PH	8° 20N	80° 67W	80	41
SANTA ROSA	PH	8° 08N	80° 95W	272	9
SANTIAGO	PH	9° 08N	79° 37W	135	9
TOCUMEN	PH	7° 38N	80° 38W	50	42

NOTES

1. LATITUDE/LONGITUDE IN DEGREES AND HUNDRETHS
2. NUMBER OF YEARS IS THE OVERALL PERIOD.
3. SUMMARY MAY USE ALL OR PART OF THE OVERALL PERIOD.
- FOR SOME STATIONS PRECIPITATION AND TEMPERATURES MAY BE RECORDED AT SITES IN THE VICINITY OF THE STATION BUT NOT AT THE SAME EXACT LOCATION.

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